What To See In America

THE MACMILLAN COMPANY
NEW YORK · BOSTON · CHICAGO · DALLAS
ATLANTA · SAN FRANCISCO

MACMILLAN & CO., LIMITED
LONDON · BOMBAY · CALCUTTA
MELBOURNE

THE MACMILLAN CO. OF CANADA, LTD.
TORONTO

Niagara Falls

What To See In America

By Clifton Johnson

Author of American Highways and Byways Series, The Picturesque Hudson, Among English Hedgerows, Along French Byways, Old-time Schools, etc.

With Five Hundred Illustrations

Published by The Macmillan Company

New York *MCMXXII*

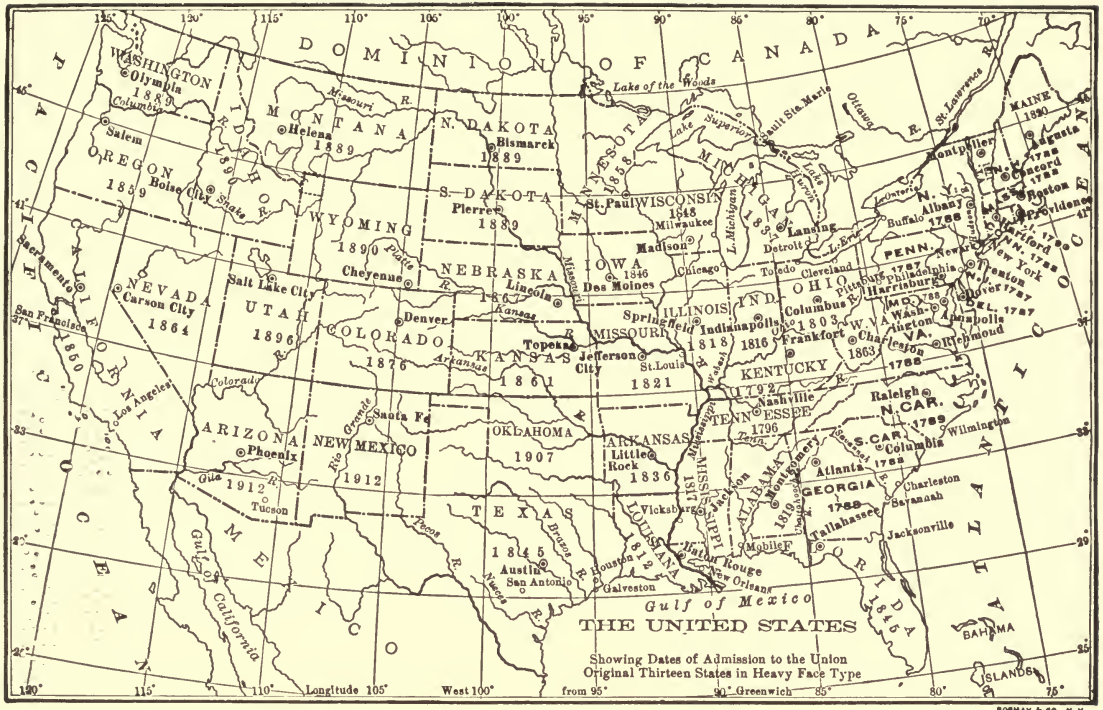
London: Macmillan and Co., Limited

E158
.36

Copyright, 1919,
By THE MACMILLAN COMPANY.

Set up and electrotyped. Published November, 1919.

Norwood Press
J. S. Cushing Co. — Berwick & Smith Co.
Norwood, Mass., U S.A.


DOMINION OF CANADA
THE UNITED STATES
Gulf of Mexico
Showing Dates of Admission to the Union
Original Thirteen States in Heavy Face Type
WASHINGTON
Olympia
1889
OREGON
1859
Salem
Columbia R.
Snake R.
MONTANA
1889
Helena
Missouri R.
N. DAKOTA
1889
Bismarck
S. DAKOTA
1889
Pierre
WYOMING
1890
Cheyenne
Platte R.
NEBRASKA
1867
Lincoln
Missouri R.
Kansas R.
Omaha
IOWA
1846
Des Moines
MINNESOTA
1858
St. Paul
Lake Superior
WISCONSIN
1848
Madison
Milwaukee
MICHIGAN
1837
Lansing
Detroit
L. Michigan
L. Erie
Chicago
Toledo
Cleveland
Buffalo
Albany
NEVADA
1864
Carson City
Sacramento R.
San Francisco
Salt Lake City
UTAH
1896
COLORADO
1876
Denver
Arkansas R.
Colorado R.
Los Angeles
ARIZONA
Phoenix
Gila R.
1912
Tucson
NEW MEXICO
1912
Santa Fe
Rio Grande R.
KANSAS
1861
Topeka
Jefferson City
St. Louis
ILLINOIS
1818
Springfield
Missouri R.
Mississippi R.
INDIANA
1816
Indianapolis
OHIO
1803
Columbus
Pittsburg
Harrisburg
PENN.
Philadelphia
New York
N. J.
Trenton
DEL.
1787
MD.
1788
Annapolis
Washington
W. VA.
1863
Charleston
VA.
1788
Richmond
KENTUCKY
1792
Frankfort
Louisville
TENNESSEE
1796
Nashville
Tenn. R.
Cumberland R.
N. CAR.
1789
Raleigh
Wilmington
S. CAR.
1788
Columbia
Charleston
Savannah
GEORGIA
1788
Atlanta
Milledgeville
Tallahassee
Jacksonville
FLORIDA
1845
ALABAMA
1819
Montgomery
Mobile
Alabama R.
Tombigbee R.
MISSISSIPPI
1817
Jackson
Vicksburg
LOUISIANA
1812
Baton Rouge
New Orleans
Mississippi R.
ARKANSAS
1836
Little Rock
OKLAHOMA
1907
TEXAS
1845
Austin
San Antonio
Houston
Galveston
Brazos R.
Pecos R.
Nueces R.
Rio Grande R.
Gulf of California
MEXICO
PACIFIC OCEAN
ATLANTIC OCEAN
BAHAMA ISLANDS
Lake of the Woods
Sault Ste. Marie
Ottawa R.
St. Lawrence R.
Montpelier
MAINE
1820
Augusta
Concord
Boston
Providence
Hartford
CONN.
1788
New Haven
Longitude 105° West 100° from 95° 90° Greenwich 85° 80° 75°
BORMAY & CO., N.Y.

CONTENTS

A condensed list of attractions — scenic, historic, industrial, legendary and personal — which make the different sections of our country interesting to the sightseer.

PAGE

I. MAINE. The "Popham Colony," York, "Lovewell's Fight" at Fryeburg, Forests, Mt. Katahdin, Lakes, Indians at Oldtown, Hunting, Fishing, Mt. Desert, Portland, Longfellow, Bowdoin College, Augusta, Blueberries, Aroostook Potatoes, Quarries, "Artemus Ward," Jacob Abbott, Sarah Orne Jewett . 1

II. NEW HAMPSHIRE. The First Settlements at Dover and Rye, John Stark, Dartmouth College, The White Mountains, Lake Winnepesaukee, Isles of Shoals, Cornish, Portsmouth, Horace Greeley, Daniel Webster, Concord the Capital, Manchester, Granite Quarries and Mica Mines 13

III. VERMONT. The "Indian Road," Brattleboro, Bennington, Montpelier, Lake Champlain, Burlington, Cows, Maple Sugar, St. Johnsbury, Marble Quarries, Mt. Mansfield 24

IV. MASSACHUSETTS. Plymouth Rock, Boston, Benjamin Franklin, Emerson, Parkman, Bunker Hill, Brookline, Nantasket Beach, Brook Farm, Salem, Hawthorne, Marblehead, Cape Ann, Gloucester, Quincy, Minot's Ledge Lighthouse, Cape Cod, Nantucket, Cambridge, Harvard College, Lexington, Concord, Whittier, Worcester, Springfield, Bryant, "Fighting Joe Hooker," Berkshire, Greylock, Hoosac Tunnel, "Josh Billings" . . 30

V. CONNECTICUT. Windsor, Saybrook, Pequot Hill, Sachem's Head, Tobacco, Manufactures, Old Newgate Prison, New Haven, The Regicides, Yale University, Bridgeport, "Gen. Tom Thumb,"

573933

PAGE

New London, Oysters, Hartford, Noah Webster, Jonathan Edwards, Harriet Beecher Stowe, John Brown, "Old Put," Nathan Hale, Bear Mountain 49

VI. Rhode Island. Providence, Roger Williams, Narragansett Bay, Manufactures, Gen. Nathanael Greene, Newport, The "Old Stone Mill," Mt. Hope, King Philip, Block Island, The "Dancing Mortar," Durfee Hill 57

VII. New York City. Manhattan Island, The Statue of Liberty, The Battery, Bowling Green, Wall Street, Trinity Church, St. Paul's Chapel, Equitable Building, Washington Irving, City Hall, Woolworth Building, Grace Church, The Bowery, Railroad Stations, Washington Square, Fifth Avenue, Flatiron Building, Metropolitan Life Tower, Waldorf-Astoria Hotel, Public Library, St. Patrick's Cathedral, The "Great White Way," Central Park, Riverside Drive, Columbia University, Jumel Mansion, Bronx Park, Hell Gate, Brooklyn Bridge, Brooklyn, Coney Island 63

VIII. New York State. The Palisades, Tarrytown, Stony Point, The Highlands, West Point, Vassar College, The Catskills, Rip Van Winkle, Storm King, Albany, Mohawk River, Shakers, Saratoga, Lake George, Lake Champlain, Ticonderoga, Ausable Chasm, The Adirondacks, Mt. Marcy, Schenectady, Cooperstown, Cornell University, Taghanic Fall, Rochester, Chautauqua, Buffalo, Erie Canal, Niagara, The Thousand Islands, Long Island, Walt Whitman 81

IX. New Jersey. First Permanent Settlement at Bergen Point, Palisades, The Hamilton-Burr Duel, Newark, Delaware Water Gap, High Point, Trenton, J. Fenimore Cooper, Princeton College, Sandy Hook, Long Branch, Atlantic City, Cape May, Lakewood 105

X. Pennsylvania. Philadelphia, Battle of Germantown, Railroads, Valley Forge, Pottstown "Ringing Rocks," Lancaster Indian Massacre, Harrisburg, "Blue Juniata," Horseshoe Curve, Blue Knob, Gettysburg, Battle of the Brandywine, Robert

PAGE

Fulton, Valley of Wyoming, Coal, Pittsburgh, The Johnstown Flood, Oil-wells, Grapes 111

XI. Delaware. Centerville, Lewes, Wilmington, New Castle, Dover, Great Cypress Swamp 128

XII. Maryland. Kent Island, St. Mary's, Baltimore, First Telegraph Line, Chesapeake Bay, Annapolis, Great Falls of the Potomac, Barbara Frietchie, Battle of Antietam, Backbone Mountain 132

XIII. The Nation's Capital. Pennsylvania Avenue, The British Capture the City, The Capitol, The White House, The Washington Monument, Congressional Library, Bureau of Engraving and Printing, Museum of National History, Union Railway Station, Theater in Which Lincoln was Shot . . . 138

XIV. Virginia. Jamestown, Pocahontas, Williamsburg, Yorktown, Hampton Roads, Old Point Comfort, Fortress Monroe, Great Dismal Swamp, Richmond, Petersburg, Appomattox Court House, Fredericksburg, Battle of the Wilderness, Arlington, Alexandria, Mt. Vernon, Battle of Bull Run, Shenandoah Valley, Caverns of Luray, Woodrow Wilson, Natural Bridge, Hot Springs, Mt. Rogers, Thomas Jefferson 145

XV. West Virginia. Shepherdstown, Harpers Ferry, Charlestown, Wheeling, Spruce Knob, White Sulphur Springs, Moundsville 158

XVI. North Carolina. Roanoke Island, "Blackbeard," Charlotte, Cotton Mills, Raleigh, Pinehurst, Great Smoky Mountains, Asheville, Mt. Mitchell, Battle of Kings Mountain, Daniel Boone 162

XVII. South Carolina. Charleston, An Early Railroad, Camden, Battle of the Cowpens, Eutaw Springs, Columbia, Aiken, Sassafras Mountain 170

XVIII. Georgia. Savannah, Eli Whitney and His Cotton Gin, Bonaventura Cemetery, Augusta, Andersonville, Atlanta, Sherman's "March to the Sea," Joel Chandler Harris, Stone Mountain, Brasstown Bald 176

PAGE

XIX. Florida. Mt. Pleasant, Climate, Pine Forests, Palmettos, Ponce de Leon, Fernando de Soto, St. Augustine, St. Johns River, Jacksonville, Palatka, The Ocklawaha, Shell Mounds, Ormond, New Smyrna, Indian River, Palm Beach, The Sea-going Railway, Key West, The Dry Tortugas, Pensacola, Tallahassee, The "Wakulla Volcano," Suwannee River, Lake Okechobee, Oranges, Tampa, Everglades, Seminole Indians 182

XX. Alabama. Mobile, War with the Indians, Montgomery, Tuskegee and Booker Washington, Birmingham, Cheaha Mountain 204

XXI. Tennessee. Davy Crockett, Nashville, Andrew Jackson, Memphis, Fort Donelson, Battle of Shiloh, Chattanooga, Lookout Mountain, Missionary Ridge, Admiral Farragut, Mt. Guyot 209

XXII. Kentucky. Daniel Boone, Harrodsburg, The Moundbuilders, Louisville, Lexington, Berea College, Big Bone Lick, Abraham Lincoln, Jefferson Davis, The Mammoth Cave, Big Black Mountain 215

XXIII. Ohio. Moravian Missions, Marietta, Moundbuilders, Cincinnati, The Battle of Fallen Timber, The Ohio River, Cleveland, Sandusky, Columbus, Dayton, Six Ohio-born Presidents of the United States 222

XXIV. Indiana. Vincennes, Indianapolis, Battle of Tippecanoe, Gary, The Harmony Society, Wyandotte Cave, Carlos City, James Whitcomb Riley 230

XXV. Illinois. Starved Rock, The Black Hawk War, Springfield, Cairo, Alton, Nauvoo the City of the Mormon Saints, The Icarians, Charles Mound, Rockford, Chicago, Zion City 236

XXVI. Michigan. Sault Sainte Marie, Mackinac Island, Lake Huron, Detroit, Mt. Clemens, Ann Arbor, Lansing, Lake Superior, The Pictured Rocks, Calumet and Hecla Copper Mine, Porcupine Mountain 247

PAGE

XXVII. Wisconsin. Rib Hill, Mound-builders, Green Bay, Madison, Black Hawk, Lake Winnebago, Devils Lake, Milwaukee, The Yerkes Observatory 254

XXVIII. Minnesota. Falls of St. Anthony, Fort Snelling, St. Paul, Minneapolis, Lake Minnetonka, Falls of Minnehaha, The Source of the Mississippi, The Lake Park Region, Fishing, Hunting, and Canoeing, Grand Marais, Lake of the Woods, Duluth, Iron Mines, Mesabi Range, Red River Valley, St. Croix River, Lake Pepin 260

XXIX. Iowa. Pringhar, Mt. McGregor, Dubuque, Des Moines, Spirit Lake, Council Bluffs, Amana Inspirationists . 272

XXX. Missouri. The Missouri River, St. Genevieve, St. Louis, Jefferson City, Iron Mountain, Taum Sauk Mountain, "Mark Twain," Kansas City 276

XXXI. Arkansas. Blue Mountain, The Ozarks, The Arkansas River, Little Rock, Hot Springs Reservation . . 281

XXXII. Louisiana. Mississippi River, De Soto, New Orleans, Barataria Bay, Grand Isle Pirates, Lost Island, Eads Jetties, Baton Rouge, Audubon the Naturalist, Sulphur . . 285

XXXIII. Mississippi. Biloxi, Natchez, Vicksburg, Jackson, Pass Christian, Holly Springs 296

XXXIV. Texas. Size and Climate, San Antonio, The Alamo, Houston, Austin, El Paso, El Capitan, The Rio Grande, Eagle Pass, Brownsville, Corpus Christi, La Salle, Galveston, Beaumont Oil Region, Rice, Dallas, Fort Worth, The Panhandle, The Staked Plain, Cattle 300

XXXV. Oklahoma. Indians, "Boomers," Oklahoma City, Shawnee, Platt National Park 312

XXXVI. Kansas. Great Plains, Fort Leavenworth, Atchison, Lawrence, Osawatomie, Kansas City, Topeka, Dodge, Buffalo. 315

XXXVII. Nebraska. Omaha, Mormons, Union Pacific Railroad, Overland Trail, "Hell on Wheels," Lincoln, Columbus . 321

PAGE

XXXVIII. South Dakota. Size, Crops and Cattle, Fort Pierre, Sioux Falls, Wind Cave National Park, Hot Springs, Bad Lands, Blizzards, Black Hills, Harney Peak, Gold, Deadwood, Wild Bill, The Homestake Mine, Spearfish Canyon . . 326

XXXIX. North Dakota. Pembina, The Red River of the North, Bonanza Farms, "Jimtown," Buffalo, Sully's Hill National Park, Fargo, Bismarck, Pyramid Park, Summit 331

XL. Montana. Granite Peak, Rocky Mountains, Fort Benton, Helena, Butte, Gallatin Valley, Dry Farming, The Missouri River and Its Falls, Range Cattle and Sheep, Bitter Root National Forest, Glacier National Park, Blackfeet Indian Reservation, Custer's Last Fight 335

XLI. Idaho. Hyndman Peak, Sawtooth Mountains, Lewis and Clark Expedition, Mines of the Cœur d'Alene, Boise, Arrowrock Dam, Soda Springs, St. Anthony, Seven Devils Mountains, Shoshone Falls, The Snake River Lava Plains, Sagebrush . . 356

XLII. Wyoming. Fort Laramie, "Bill" Nye, Gold, Cheyenne, Devil's Tower, Coal, Cattle and Sheep Industry, Gannet Peak, Yellowstone National Park 363

XLIII. Utah. Great Salt Lake, Mormons, Salt Lake City, Salduro, The Devil's Slide, First Transcontinental Railway, Midway Hot Pots, Kings Peak, Mountain Meadows Massacre, Little Zion, Natural Bridges 386

XLIV. Colorado. The Continental Divide, Mt. Elbert, Conejos, Denver, "Potato Clark," Sand Creek Massacre of Indians, Boulder Canyon, Silver Plume, Ladder to Cloudland, Rocky Mountain National Park, National Forests, Palmer Lake, Pikes Peak, Manitou, Colorado Springs, Garden of the Gods, Cripple Creek, Greeley, Royal Gorge, Leadville, Mountain of the Holy Cross, Glenwood Springs, Mesa Verde National Park, Kit Carson 397

XLV. New Mexico. Climate, Santa Fe, Cliff-dwellers, Sanctuario and Its Miracles, North Truchas Peak, Laos, Las Vegas, Albuquerque, Laguna, Acoma, The Enchanted Mesa, Zuñi 426

PAGE

XLVI. Arizona. Tucson, Yuma, Desert Animals, Irrigation, Phoenix, The Roosevelt Dam, The Apache Trail, Superstition Mountains, The Cactus and Other Desert Growths, Casa Grande Ruin, Petrified Forests, The Painted Desert, The Sky Cities of the Hopi Indians, Navajo Reservation, Flagstaff, Lowell Observatory, San Francisco Mountains, Crater Mound, Bill Williams Mountain, Grand Canyon 438

XLVII. California. Size, Climate, National Forests, San Diego, Missions, San Francisco, Robert Louis Stevenson, Mt. Tamalpais, Sonoma County Geysers, Mt. Shasta, Lassen Volcano, Oakland, Sacramento, Discovery of Gold, Stanford University, San Jose, Lick Observatory, Santa Cruz, Monterey, The Pinnacles, Paso Robles, Santa Barbara, The San Joaquin Valley, Yosemite National Park, Mariposa Grove, Sequoia National Park, Kings River Canyon, Mt. Whitney, Death Valley, San Bernadino County, Los Angeles, Pasadena, Riverside, Oranges, Catalina Island, Capistrano, Mission of San Luis Rey, Mesa Grande Indians, Imperial Valley 456

XLVIII. Nevada. Irrigation, Mines, Virginia City, Tonopah, Goldfield, Bullfrog, Carson, Reno, Lake Tahoe, East Peak 495

XLIX. Oregon. Astoria, Salmon Fisheries, Columbia River, Willamette Valley, Portland, Salem, Multnomah Falls, Columbia Cascades, Hood River Apples, Mt. Hood, The Dalles, Deschutes Canyon, Pendleton Round-up, Hot Lake, Hunting and Fishing, Josephine County Caves, Rogue River, Crater Lake . . . 501

L. Washington. Vancouver, Walla Walla, Whitman's Ride, Spokane, The "Apple Way," The Big Bend Wheat Region, Yakima Valley, Puget Sound, Olympia, Seattle, Snoqualmie Falls, Tacoma, Mt. Rainier, Forests, Lake Chelan, Mt. Baker, Yachting, Olympic Mountains, Wilderness Game, Grays Harbor, Whales, North Beach, Weather 519

INTRODUCTORY NOTE

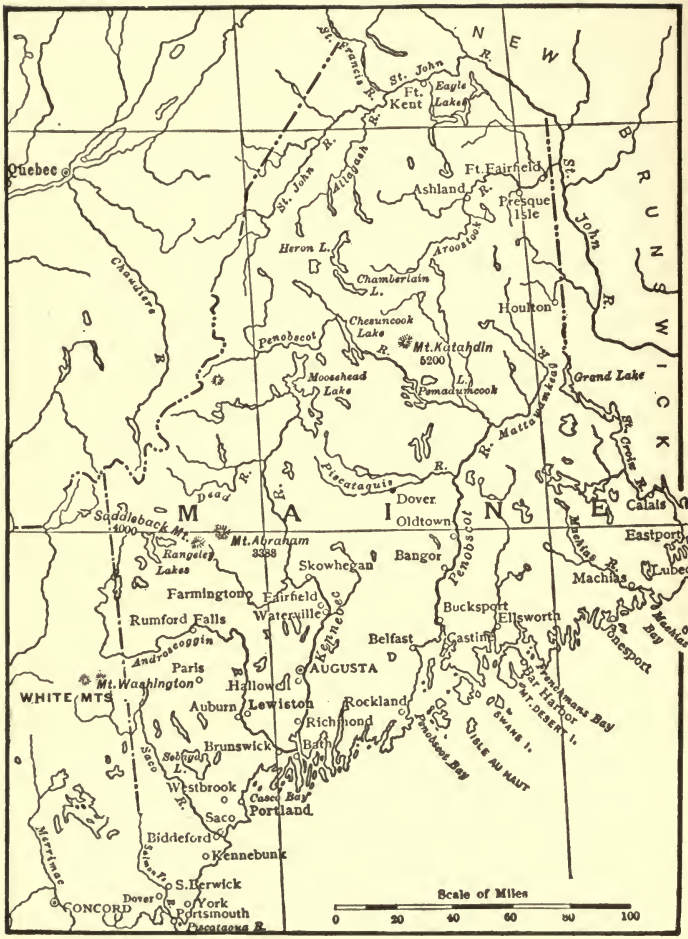
In this compact, single volume, with its 500 illustrations, each state in the Union has a chapter, and each of the cities of New York and Washington has an additional chapter. The book is concerned with the human interest of our country in nature, history, industry, literature, legend, and biography. It is intended for travelers who visit the places of interest in person, and also for those other travelers whom chance or necessity keeps at home, but who travel far and wide on the wings of fancy.

The information is much concentrated, but not to the extent of sacrificing readableness. Under each state is included such things as the first settlement, the capital, the largest city, the highest point, and facts of general interest concerning its past and present that add to the traveler's zest in visiting it. My own wanderings have taken me to every state in the Union, and have furnished much of value in preparing the book, but I have gathered additional material from many sources.

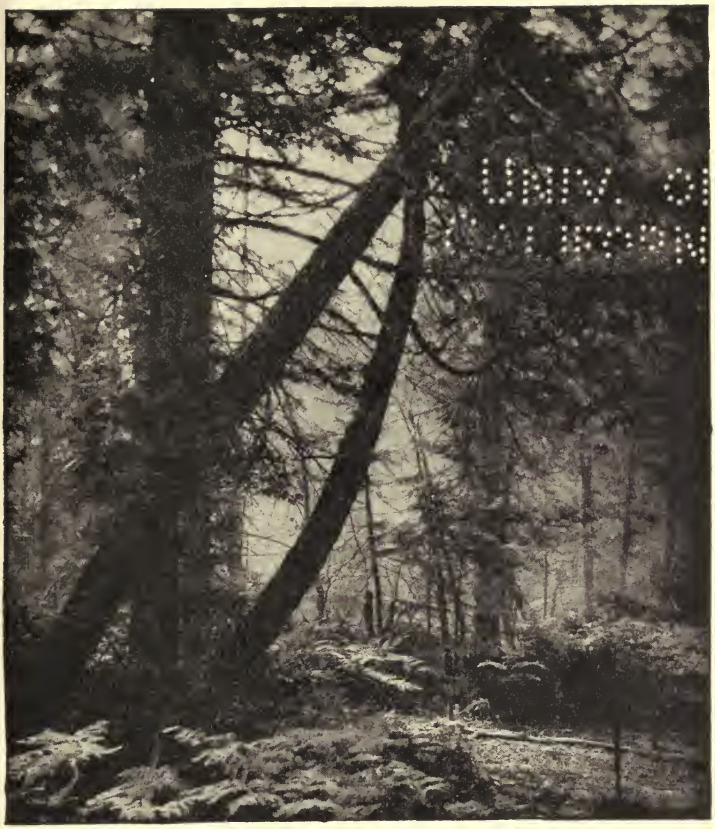
The photographs used for illustrations are in part those I made on my travels, and in part those of others. Associations interested in stimulating vacation travel have helped in supplying photographs; so have railroad companies and public libraries and individuals; but, most of all, I am indebted to the National Park Service and Forest Service and other departments at Washington. I doubt if anything like so large and charming and characteristic a collection of American scenes has ever before been gotten together in a single book.

CLIFTON JOHNSON.

HADLEY, MASS.



EACH OF THE OTHER STATES WILL BE FOUND IN A MAP THAT IS IN OR NEAR THE CHAPTER DEVOTED TO THE STATE



In the Heart of the Maine Woods

I

Maine

Maine is called the "Pine Tree State," and, though the tall pines that thrust up above the other trees of the woodlands have mostly been cut, the region is one where great areas are still covered with forest, to which hosts of people resort each year to enjoy the wilderness. Maine is also called the

"State with 100 Harbors," a reference to its picturesque coast broken by many inlets and bordered by numerous islands. It is nearer Europe than any other section of our country, and was early visited by explorers and fishermen from across the Atlantic.

The first attempt to found a settlement was made in 1607, when, toward the end of August, the "Popham Colony" established itself on the peninsula west of the Kennebec, where that river joins the sea. By the time winter set in with its sleet and snow the colonists had finished a fort, a storehouse, and a number of dwellings. But the storehouse burned with all their provisions, and they were obliged to live on fish and such game as they could shoot, and on dog meat. Their cabins could not keep out the searching winds and biting frost. Many were sick, and their leader, George Popham, died. In the spring a ship came with supplies, but the settlers declared there was no use of Englishmen's trying to live in such a cold country, and they all either returned to England, or went in a little vessel they had built to Jamestown, Virginia.

Capt. John Smith, who came across the ocean with two ships in 1614, and sailed along the coast from the Penobscot River to Cape Cod, gave New England its name. He did some exploring inland, hoping to discover gold and copper mines. No mines were found, but he was able to sail for England presently with a valuable cargo of fish and furs.

Maine's first permanent settlement was made in 1624 by emigrants from Plymouth Colony at what is now York, but which they gave the local Indian name of Agamenticus. This was in the tract of country of which Sir Ferdinando Gorges was made proprietary lord a few years later. His territory was bounded on the east by the Kennebec and on the west by the Piscataqua, and extended as far

north as Lake Umbagog. It was named Maine in honor of the English queen, who came from France, where her estate was in the province of Mayne. Gorges selected the plantation of Agamenticus for his capital, and made it a city, naming it for himself, Gorgiana. It comprised twenty-one square miles, had a mayor, aldermen, and councilmen; and there were policemen, each of whom carried a white rod. Yet Gorgiana never had as many as three hundred inhabitants.

INDIAN ISLAND AT OLDTOWN

Maine developed peacefully for about fifty years, at the end of which time it had five or six thousand inhabitants distributed in thirteen thriving settlements. Then came the Indian wars, and for nearly a century the settlers were in constant terror of savage invaders. The trouble began on the 4th of August, 1676, when a party of Indians, whose leader was "Simon, the Yankee-killer," invaded the home of Anthony Brackett at Back Cove in what is now Portland. They seized and bound the entire household, which consisted of Mr. and Mrs. Brackett, their five children, and a

Photo by Harold Baynes

REYNARD

© *Kalkoff Co. N. Y.*

Block House at Fort Kent

negro man-servant. Afterward they went to neighboring homes, killed or captured thirty-four persons, and set the buildings on fire. The Brackett family continued in captivity until November, at which time their captors came in their wanderings to the north side of Casco Bay. Mrs. Brackett found an old birch canoe on the beach. She repaired it, and the family and the negro man secretly got into it and paddled across the bay to Black Point. A vessel bound for the Piscataqua chanced to be there, and on that they made good their escape.

Of all the combats in Maine between the whites and Indians the best known was "Lovewell's Fight." In the spring of 1725 Captain Lovewell and forty-six volunteers started from Dunstable, Massachusetts, to hunt Indians about the headwaters of the Saco. They did this partly because the Indians were a menace to the settlements, and partly to secure the liberal bounty which had been promised for every Indian scalp. On the night of Friday, May 7th, they encamped beside what is now known as Lovewell's Pond in Fryeburg, Maine, only two miles from Pigwacket, the principal village of the Indians of that region. Early the next morning they killed an Indian, and not long afterward were attacked by three times their number, led by Paugus, chief of the tribe. The fight continued until dusk, when the Indians withdrew. About midnight the moon rose, and the English began a retreat. Only nine were uninjured. Some of them died on

the way to the settlements, and those who finally reached home arrived half starved.

Nearly all of northern Maine is woodland, and in this woodland both Connecticut and Rhode Island might be placed and lost to the world and to each other. From the summit of Mt. Katahdin, the state's loftiest height, which rises 5200 feet above the level of the sea, only trees are in sight as far as the eye can reach. The most numerous of the valuable forest trees now are spruce. An immense amount of timber comes from the Maine wilderness every year. Spruce is very largely used for paper as well as for lumber. The first wood pulp mill began operations in 1870. The popular nickname of the people of the state is "Foxes," because of the abundance of these creatures, and because so many of the inhabitants live or work in the woods.

Mt. Katahdin from the West Branch of the Penobscot

Of all the forest trees none was put to more uses by the Indians and pioneer settlers than the paper birch. The

woodsman with his ax could obtain from it tent, canoe, cups, plates, tablecloths, paper to write on, torches, and kindlings and other fuel. A piece of bark two feet square could be made into a vessel for catching maple sap by folding it into a straight-sided pan, and bending the corners around and fastening them in place with wooden pins.

There are many mills along the little streams that come from the wooded uplands in various parts of the state. These mills convert both hard and soft wood into such articles as furniture, sleds, tool handles, toys, clothespins, and toothpicks. Much fine white birch wood grows in some sections, and thousands of cords of it are used yearly for spools.

The Maine woods suffer seriously during the dry summer weather from fires. There may be many fires burning at the same time, and the air will be hazy with smoke over great stretches of country.

Maine contains more than 1800 lakes and ponds. All these, together with the rivers, have a surface amounting to fully one tenth of the land area of the state. The largest lake is Moosehead, forty miles long and four to twelve broad. From its borders Mt. Kineo rises 800 feet above the lake level. The mountain faces the water in so perpendicular a precipice that a person could jump into the lake from its top. This is the largest mass of hornstone known in the world, and the New England Indians got from it much of the flint they used for their arrow-heads.

The solitudes around Moosehead are frequented by big game, and there is an abundance of fish and water-fowl. Only a few faint trails wind through the forest, and the rivers and lakes are the chief thoroughfares. Even the Indians are not altogether lacking, for some members of the once powerful Penobscot tribe may still be encountered in the woods hunting and fishing, or acting as guides. The four

hundred persons who constitute this tribe have permanent dwellings on the outskirts of the wilderness at Oldtown, where they occupy an island in the river.

The Southern Cross on the Maine Coast

The levels of many of the wilderness lakes vary only a few feet, and boatmen, by short portages, or by none at all, pass easily from one to another. Hunters, fishermen, and other pleasure-seekers often make long trips on the streams and lakes for days and weeks at a time. A guide and two persons can travel comfortably in a canoe and carry a tent, food, and the necessary camp utensils. In the fall shooting season thousands of sportsmen come to the wild lands from the cities near and far.

Moosehead Lake and Squaw Mountain

Scarcely less well known than Moosehead Lake are the Rangeley Lakes, nestling among forested hills in the northwest corner of the state. They are called a fisherman's paradise. There are five of them, all connected by navigable waterways, and small steamers ply on them and call at the various camps.

The entire Maine coast from Portland to New Brunswick

is a labyrinth of headlands, bays, and isles. In the opposite direction it is indented comparatively little, and here are the sandy beaches of Old Orchard, York, and other well-known summer resorts. Maine's shore fisheries are important, and more than seventy factories are engaged in canning lobsters, clams, and small herring. Lobsters are caught in cage-like traps called lobster pots. Men and boys dig the clams on the mud flats at low tide. In Europe various little fishes have long been canned as sardines, and since 1875 this industry has developed on the coast of Maine. The herring used for the purpose are caught in weirs.

Portland Head Lighthouse

Small steamers thread the channels among the islands and bring a multitude of visitors every year. The largest and most beautiful of the islands is Mt. Desert, which is about fourteen miles long and seven broad. There are thirteen mountains on it, and an equal number of lakes nestle in the hollows and wild ravines. Champlain, the great French explorer, discovered it in 1604. He observed that the summits of its heights were all bare and rocky and therefore called it "The Isle of Desert Mountains."

The French started a settlement on Mt. Desert in 1613. But presently an armed English ship from Virginia appeared

and saluted them with a broadside of guns. The settlement was destroyed, and the Frenchmen were taken away. The first white man to establish a permanent home on the island was Abraham Somes of Gloucester. He came thither in his fishing boat in 1761, and cut a load of barrel staves

Old Orchard Beach

which he carried back. The next year he voyaged to the island with his wife and children, and built a log house at the head of the sound that bears his name. About 1860 the island began to win the favor of wandering artists and parties of college students on a vacation, and within twenty years Bar Harbor developed from a primitive village of farmers and fishermen into one of the most popular resorts on the New England coast.

Portland, which is by far the largest place in the state, was completely destroyed by the Indians in 1676 and again in 1690. On the latter occasion no one was left to bury the dead. More than two years afterward a ship that was voyaging along the coast stopped there, and the crew gathered the bleached bones and buried them. Early in the Revolutionary War four British vessels entered the harbor and

Lobster Lake

showered cannon balls, bombs, and grapeshot on the defenseless village. Most of the people fled for their lives, and many of them saved only what they bore away on their backs. Armed parties from the ships landed and applied torches to the buildings so that the greater part of the town was destroyed.

The first steamboat used on the coast was made by a Portland captain in 1822. He placed an old engine on a flat-bottomed boat, and rigged up some paddle wheels so that he was able to run the craft to the islands of Casco Bay and some of the adjacent mainland towns. He called his vessel the *Kennebec*, but the people called it the *Horned Hog*.

On July 4, 1866, a fire-cracker carelessly thrown into a builder's shop started a conflagration which raged for fifteen hours, when a change of wind enabled Portland's firemen and engines, with the aid of those that had come from other places, to control the flames. The fire swept over 200 acres in the center of the city, burned 1800 buildings, rendered 6000 persons homeless, and caused a property loss of $15,000,000.

Henry Wadsworth Longfellow was born in a three-story frame house near the harbor, in 1807. His grandfather erected in 1785 the first house in Portland to be built entirely of brick, and to this the poet was brought as an infant. It was his home until his marriage. Until the end of his life he stayed there whenever he visited the scenes of his youth,

and many of his best poems were written in it. He graduated at Bowdoin College in the manufacturing city of Brunswick, and was for some years a Bowdoin professor. Hawthorne was another famous Bowdoin collegian. Harriet Beecher Stowe was living at Brunswick when she wrote "Uncle Tom's Cabin." Her husband was at that time an instructor in the college.

Bath is the shipbuilding city of Maine. Bangor on the Penobscot is the most notable lumber center in New England. Augusta, the capital of the state, is the largest city on the Kennebec.

Farming is the leading industry in most of the country towns south of the forest region. Immense quantities of apples, squashes, blueberries, and sweet corn are canned and shipped to the cities. Blueberries grow wild in all parts of the state, but are particularly plentiful in several

Bar Harbor

rocky townships of Washington County which have been largely swept by fire. The harvest continues for about six weeks, and most of the hundreds of pickers camp where

the berries grow. The picking is done chiefly by women and children.

In the northeastern part of the state is a very rich new agricultural country. Potatoes are the principal farm product there, particularly in the great county of Aroostook, which is nearly as large as the entire state of Massachusetts. They are planted, cultivated, and dug by machines.

One of the valuable products of Maine is stone. There are important quarries at various places along the coast where granite is blasted out, cut into such shapes and sizes as are desired, and shipped to different sections of the country. In and around Rockland are inexhaustible limestone beds that have been worked for two centuries. The lime produced in Maine exceeds the output of any other state.

Among Maine's famous men perhaps none is more widely known than the humorist, Charles Farrar Browne, or "Artemus Ward," as he called himself. He was born in 1834 in the little village of Waterford, some fifty miles north of Portland, and there is his grave. Another notable Maine writer was Jacob Abbott, who was born in 1803 at Hallowell on the Kennebec. He was one of five brothers, all of whom became preachers and teachers, and, with a single exception, authors. He was the most popular American writer for children of his time. His Rollo Books were particularly famous. In later life he lived at Farmington, where he had a place which he called "Fewacres" on high ground overlooking a river winding through one of the most fertile and tranquil valleys in New England. A third Maine writer of exceptional merit was Sarah Orne Jewett, whose birthplace was South Berwick.

Mt. Washington

II

New Hampshire

New Hampshire got its name from a county in southern England, which was the home of an English merchant and shipmaster to whom the king granted a tract of land north of Massachusetts. The first settlements were made in 1623 at Dover, a few miles up the Piscataqua, and Rye on the coast. A scattered settlement established somewhat later at the mouth of the river received the odd name of Strawberry Bank.

For a long time the leading man of the province was Richard Waldron of Dover. He was largely engaged in trading with the Indians, and, though a thorough Puritan in his religion, cheated them at every opportunity. But what roused the Indians most was his capture of several hundred of them on the borders of the settlement through a pretense that the whites would meet them and engage in a friendly

sham fight. When he ordered a grand round of musketry the Indians promptly discharged their guns, but the English withheld their fire and took into custody the entire body of savages without bloodshed. This treachery was never forgiven. There were five garrison houses in the village which had grown up near Major Waldron's grist and saw mill at the Cocheco Falls, and to these the families in the unprotected houses retired at night, but no watch was kept. In the summer of 1688 many of the local Indians resorted to Dover ostensibly to trade, and two squaws applied at each of the garrison houses for lodging. Such requests were not unusual, and only at one of the fortified dwellings was admittance refused. When the whites were asleep and all was quiet, the squaw visitors opened the doors, and in rushed the waiting Indian warriors. Major Waldron, though eighty years old, fought valiantly, but was finally killed. Twenty-two other persons were slain, and twenty-nine captured.

Gen. John Stark, the hero of Bennington, was a New Hampshire man. He was born in 1728 at Londonderry, where his father was one of the early settlers on the New England frontier of that period. The family depended in part for their living on hunting and trapping, and once, when John and an older brother and two comrades went in a canoe on an excursion after furs to Baker's River in what is now Rumney in the central part of the state, Indians attacked them. Only the older Stark escaped. John and one other were captured, and the fourth member of the party was killed. The Indians took their two captives up beyond Lake Memphremagog to their tribal home in Canada. There the captives were presently compelled to run the gantlet. The young warriors, each armed with a rod, ranged themselves in two lines a few feet apart ready to strike the captives as they ran between the lines. Stark, who was athletic and adroit, had no sooner started than he snatched a rod

from the nearest Indian, and as he ran down the lines struck right and left, scattering the savages before him. This exploit gained favor for him among the older Indians, and he was later adopted into the tribe. After a captivity of several months he and his companion were redeemed. He often fought the savages in the service of his state as time went on, and he did his part valiantly in various battles of the Revolution. Stark died when ninety-four years old at his home in Manchester, and lies buried there on rising ground that overlooks the Merrimac.

THE OLD MAN OF THE MOUNTAIN

New Hampshire's leading educational institution is Dartmouth College, in Hanover, on the Connecticut River. It originated in a plan for educating Indian youths to be missionaries. College work began in 1770 in a clearing amid a forest of lofty pines where two or three small log huts had been built.

MT. WASHINGTON FROM PINKHAM NOTCH

In the northern part of the state are the White Mountains, which include no less than twenty bold peaks, and abound in wild valleys, deep gorges,

Winter in the White Mountains

lakes, and cascades. The name refers to the snow which whitens the bare higher summits for so much of the year. The first settler among the mountains was a hunter who established himself there in 1792. There were no hotels in the region until about 1850, but after that development as a summer resort was rapid, and it became known as "The Switzerland of America." Another descriptive title is "The Roof of New England." Its scattered towns and villages are almost wholly devoted to caring for warm weather visitors. One of the towns is Bethlehem, which is higher up and has more hotels than any other town in New England. It lies on a breezy upland slope with a vast panorama of mountain ranges rimming most of the horizon. The permanent inhabitants number scarcely more than a thousand, but the summer population is a multitude.

Mt. Washington, the monarch of all New England heights, rises 6293 feet above sea level. As you ascend it the trees steadily diminish in height until at 4000 feet they are only scraggly shrubs, gray with age and shaggy moss. Still farther up, even these earth-hugging birches and spruces

find the soil too thin and the warfare with the elements too strenuous, and there is nought but a drear waste of shattered lichened rock, with intervals of coarse grass, moss, diminutive blueberry bushes, and a few dainty blossoms.

A bridle path was cut to the top in 1819, and the next year some gentlemen who stayed on the summit overnight named the different peaks of what has since been known as the Presidential Range. The names are those of the early presidents, Washington, Adams, Jefferson, Madison, Monroe, and Jackson. In 1840 the first horse was ridden to the top of Mt. Washington, and thirteen years later a house was erected on the summit. All the buildings there have to be made secure by anchoring with numerous cables and rods in order to withstand the fierce gales which on this bleak height have registered the amazing velocity of one hundred and eighty miles an hour. A good but steep road enables automobiles to go to the top. Most people, however, prefer to make the ascent on a queer little railway, three miles long, which was completed in 1869. When its inventor applied to the legislature for a charter, the scheme seemed so impossible that a member sarcastically moved to give the applicant leave to build a railway to the moon.

Echo Lake in Franconia Notch

In 1826 the Crawford Notch was the scene of a strange catastrophe. A rustic tavern had been built in the heart

of the notch, and was the dwelling of Mr. and Mrs. Willey, their five children, and two hired men. At dusk, one August day, a storm burst on the mountains and raged with great fury through the night. This started an avalanche of earth, rocks, and trees. The tavern family became alarmed and ran out to seek safety, only to be overwhelmed. If they had remained in the house, they would not have been harmed, for the avalanche divided a little back of the dwelling and rushed by on either side. A flock of sheep that was in the yard was uninjured, but the barn was crushed and two horses in it were killed.

Aside from the mountains themselves and their wild notches, there are various other attractions which every visitor wishes to see, such as Echo Lake, the Old Man of the Mountain, and the Flume. If you stand on the shore of Echo Lake in the Franconia Notch, opposite the bluffs that rise in places abruptly from the water, your voice or the report of a pistol or the notes of a bugle come back with startling clearness on a quiet day. Only a mile distant is Profile Lake, from which the woods sweep up a precipitous slope for more than a thousand feet, and you see, near the summit, the grim stone features of the Old Man outjutting from a tremendous cliff. The face is forty feet in length. The Flume is an almost straight cleft nine hundred feet long and sixty deep. Its perpendicular walls are only a few feet apart, and a little stream which enters the upper end of the Flume by a leap from the brow of a precipice rushes down the shadowy depths with much noise and turmoil.

Bears are still shot and trapped in the mountains. The last wolf was killed in 1870. About half of the main mass of the mountains is now a National Forest.

It is estimated that the summer people leave over $5,000,000 a year in New Hampshire. Among their favorite resorts are the shores of such lakes as Sunapee and Winnepe-

saukee. These names were bestowed by the Indians. The latter means "The Smiles of the Great Spirit." Winnepesaukee is a very irregular lake with a breadth of from one to twelve miles and a length of twenty, and with three hundred and sixty islands.

Lake Sunapee

The beaches of the state's short shore line attract many visitors, and so do the famous Isles of Shoals which Lowell describes as:

"A heap of bare and splintery crags,
Tumbled about by lightning and frost,
With rifts and chasms, and storm-bleached jags,
That wait and growl for a ship to be lost."

Mt. Chocorua and Bear Camp River

These isles are about three leagues off shore. The largest of the nine islands is a mile in length and half a mile across. On one of them enough ground free from bowlders is found for a few acres of mowing, and on another for some garden plots. They are wholly treeless,

and support nothing of larger growth than huckleberry and bayberry bushes, woodbines, and wild roses. Formerly swine were numerous on Appledore, which was then known as Hog Island, and there was a tavern on Smutty Nose. A considerable number of people made the Isles their homes, and engaged in trade, commerce, and fishing; but of late years the only permanent family has been that of the lighthouse keeper.

One of the most charming and unusual of New Hampshire towns is Cornish on the bank of the Connecticut. It is a place of wonderful estates that have been developed by a colony of artists, authors, and other professional men. An early comer was Augustus St. Gaudens, America's greatest sculptor. The beautiful homes are widely scattered about the neighborhood of Blow-me-down Brook in a region of steep hills and deep valleys, with the giant form of Mt. Ascutney looming skyward not far away to the south.

A Portsmouth Entrance

Portsmouth, formerly the largest place in the state, has failed to keep pace with the manufacturing cities that use water power. Thomas Bailey Aldrich, the poet, was born in Portsmouth, and it was there he had the youthful experiences that he relates in his delightful "Story of a Bad Boy." The simple old house in which he lived has been preserved as a memorial.

Another famous man of remarkable originality who began life in New Hampshire was the editor, Horace Greeley. He

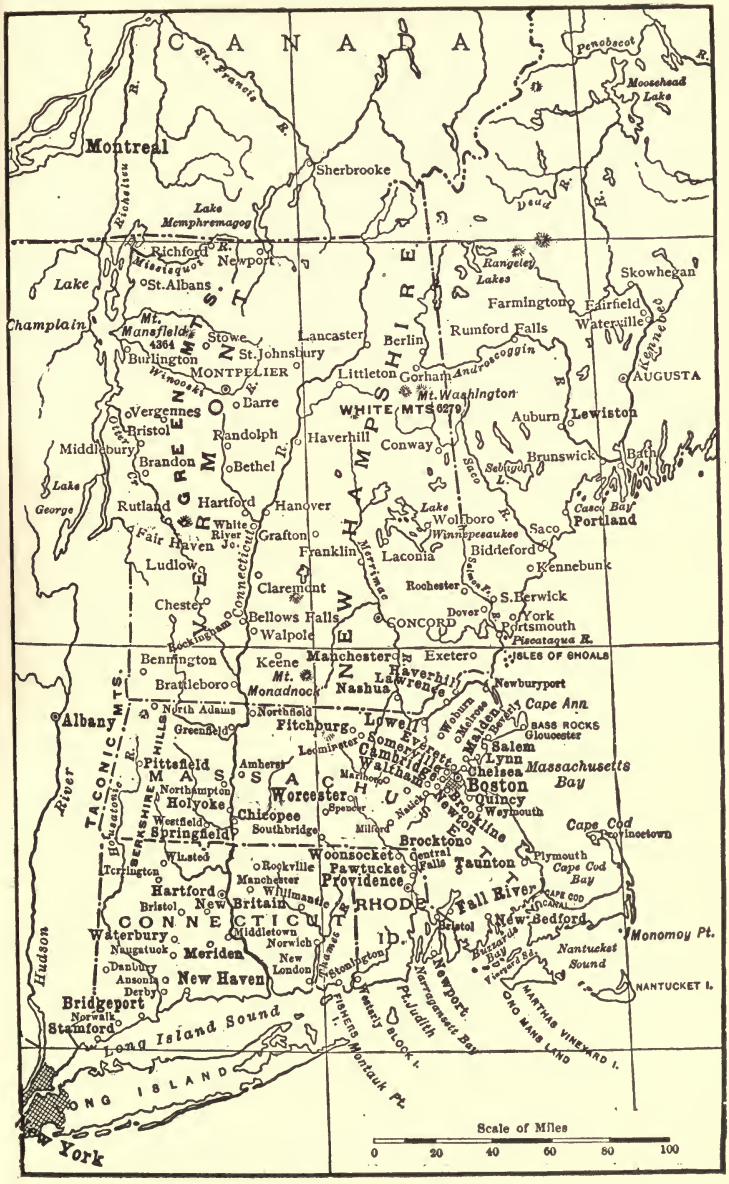
was born in 1811 in a humble farmhouse at Amherst, a few miles north of Nashua.

But the greatest reputation attained by any of New Hampshire's sons was that won by Daniel Webster, who was born in 1782 at the little town of Salisbury, about twenty miles north of Concord. He was the ninth in a family of ten children. At a very early age he was able to read with such fluency and charm that the neighbors would often stop at the farmhouse and ask "Webster's boy" to read to them. His selections were always from the Bible, and he read with a dramatic power that held his hearers spellbound. To prepare for college he went to Exeter Academy. He traveled thither, a distance of fifty miles, "riding double" behind his father. The clothes that he wore had been outgrown, and these and his rustic manners caused him much mortification at the school. He graduated at Dartmouth in 1801, and within a few years moved to Portsmouth, where he was a successful lawyer and politician. Yet a decade later, when he left to make his home in Boston, his unpaid debts amounted to thousands of dollars; for he had a spendthrift habit which resulted in his seldom being free from an oppressive burden of debt his life through.

New Hampshire's three largest cities are on the Merrimac. Of these Concord owes its growth in part to being the state capital. The growth of the other two, Manchester and Nashua, can be credited almost wholly to their manufacturing. At Concord are important granite quarries, but New Hampshire gets its title of the "Granite State," and its people their nickname of "Granite Boys," not from the amount of that stone quarried, but from the amount that exists within its boundaries. Some of its mountains, such as Mt. Washington, are almost entirely of granite. Mica is an important product of the state, and in Grafton County are the nation's leading mica mines.

At Manchester is the largest cotton mill in the world. It gets its power from the Amoskeag Falls, which have a drop of fifty-five feet. The place was a great fishing resort of the Indians and early settlers, and the shad passing up the falls in the spring are said to have been so numerous that a man could not put his hand into the water without touching some of them.

The Waterside at Portsmouth


CANADA
Montreal
St. Francis R.
Richelieu R.
Lake Memphremagog
Sherbrooke
Penobscot R.
Moosehead Lake
Dead R.
Richford
Missisquoi R.
Newport
Lake Champlain
St. Albans
Rangeley Lakes
Skowhegan
Farmington
Fairfield
Waterville
Androscoggin R.
Kennebec R.
AUGUSTA
Mt. Mansfield 4364
Stowe
Lancaster
Berlin
Rumford Falls
St. Johnsbury
Burlington
MONTPELIER
Littleton
Gorham
Mt. Washington
WHITE MTS. 6279
Auburn
Lewiston
Winooski R.
Barre
Vergennes
Bristol
Randolph
Haverhill
Conway
Middlebury
Brandon
Bethel
Brunswick
Bath
Lake George
Rutland
Hartford
Hanover
Lake Winnipesaukee
Wolfboro
Saco
Casco Bay
Portland
White River Jc.
Grafton
Franklin
Laconia
Biddeford
Fair Haven
Ludlow
Kennebunk
Connecticut R.
Claremont
Rochester
S. Berwick
Chester
Bellows Falls
CONCORD
Dover
York
Portsmouth
Piscataqua R.
Rockingham
Walpole
Isles of Shoals
Bennington
Keene
Manchester
Exeter
Mt. Monadnock
Haverhill
Lawrence
Nashua
Newburyport
Brattleboro
Cape Ann
Albany
North Adams
Northfield
Fitchburg
Lowell
Auburn
Malden
Bass Rocks
Gloucester
Greenfield
Leominster
Everett
Somerville
Cambridge
Salem
Lynn
Pittsfield
Amherst
Waltham
Chelsea
Massachusetts Bay
Hudson River
Taconic Mts.
Berkshire Hills
Housatonic R.
Northampton
Marlboro
Boston
Holyoke
Worcester
Quincy
Chicopee
Spencer
Weymouth
Westfield
Springfield
Southbridge
Milford
Brookline
Newton
Cape Cod
Provincetown
Woonsocket
Brockton
Plymouth
Cape Cod Bay
Wilsted
Terrington
Rockville
Central Falls
Pawtucket
Taunton
Hartford
Manchester
Providence
Fall River
Bristol
Whitmanville
RHODE I.
Cape Cod Canal
New Britain
Middletown
Bristol
New Bedford
CONNECTICUT
Waterbury
Norwich
Monomoy Pt.
Naugatuck
Meriden
Thames R.
Buzzards Bay
Nantucket Sound
Danbury
Ansonia
New London
Stonington
Vineyard Sd.
NANTUCKET I.
New Haven
Derby
Bridgeport
Norwalk
Narragansett Bay
Pt. Judith
MARTHAS VINEYARD I.
Stamford
Fishers I.
Montauk Pt.
Long Island Sound
LONG ISLAND
New York
Scale of Miles
0 20 40 60 80 100

HAYING IN A GREEN MOUNTAIN VALLEY

III

Vermont

In the colonial wars the predatory parties which moved back and forth between Canada and the frontier settlements of New England followed the waterways. These waterways were navigable almost to their sources by the light birch canoes of the Indians; and in winter, when they were frozen, they still offered the routes of easiest grade for snowshoes and sledges. The route oftenest chosen was by way of Lake Champlain, and up Otter Creek, then down White River and the Connecticut. This was commonly known as the "Indian Road," and for nearly the whole distance it was on the borders of or in Vermont. The raids from Canada led to the establishment of Vermont's first settlement, Fort Dummer, in the southern part of what is now Brattleboro. The fort was built by Massachusetts, and was named in honor of that colony's lieutenant governor. Shortly after its completion in 1724, it was attacked by Indians, and several of its occupants were killed or wounded.

As soon as the English came into possession of Canada

in 1759, the invasions ceased, and settlers began to drift into the region. In a short time Bennington was a hamlet in which the principal building was the Green Mountain Tavern, with a stuffed catamount for a sign. Brattleboro boasted the only store in the province, Westminster had a courthouse and jail, and at Vergennes on Otter Creek were a mill and a half dozen cabins.

A Lake Champlain Ferry

After the inflow of settlers began, New York and New Hampshire both laid claim to the whole region, and there ensued much hostility between these colonies. The settlers organized under Ethan Allen of Bennington to oppose the New Yorkers, and adopted the name of Green Mountain Boys, a name which still endures as the popular nickname of the people of the state.

When news of the battle of Lexington reached Vermont, the leading men met at Bennington in the Catamount Tavern and "attempted to explore futurity." The result of their deliberations was that about one hundred and fifty Green Mountain Boys, together with forty recruits from Massachusetts and sixteen from Connecticut, all under the leadership of Ethan Allen, captured the stronghold of Ticonderoga. Two years later Burgoyne's army made its way down from Canada, and troops from Vermont, New Hampshire, and Massachusetts gathered to oppose the invaders. A foraging force of seven hundred British and one hundred Indians

was attacked August 16 on a hill west of Bennington by the Yankee farmers. As Gen. John Stark led a charge he shouted, "Those redcoats are ours to-day or Molly Stark is a widow!"

So vigorous was the onset that the Indians stole away in affright, and few of the British escaped death or capture. A supporting enemy force of six hundred that arrived later in the day renewed the battle, but when the sun had set it hastily retreated. Two of the cannon captured in the combat are to be seen in the State House at Montpelier.

Willoughby Lake and Wheeler Mountain

There was a time when smugglers sailed by night on Lake Champlain in armed bands of such strength that the revenue officers seldom ventured to molest them. One notorious smuggling vessel was called the *Black Snake*. This was finally seized by a party of militia in the Winooski Gorge. Three of the captors were killed in a skirmish with the smugglers.

Schooners and sloops used to dot the lake, but have been increasingly rare since 1875. Here and there on the long narrow waterway is a ferry. Most of the ferry-boats are propelled by steam, but formerly they were flat-bottomed scows that had a mast and sail. The ice makes an excellent bridge in winter, and at that time the lake is often used as a race course for horse trots. The most important lake port is Vermont's largest city, Burlington. A vast amount of lumber comes there by way of the lake from Canada, and the city is one of the

leading lumber markets of the country. In this part of the lake occurred some lively naval fighting in the War of 1812. Once during that war the islet Rock Dunder, which lifts its bare surface above the water near Burlington, was mistaken by the British for a United States vessel, and was peppered with shot.

Gathering Maple Sap

The name of one place by the lakeside which may provoke inquiry is that of Chimney Point. A settlement grew up there while the French were in possession of the fort on the opposite shore, but when the fort was captured the settlement was burned. Its blackened chimneys, however, remained for years, and they gave the point its name.

Falls at Boltonville

The most important industry of the "Green Mountain State" is agriculture. Abundant crops of hay and grain are raised, and apples and other fruits are largely grown. In no other state is so high a yield of butter secured from the cows as in Vermont. Much of the butter is made in creameries. The daily prod-

uct of one St. Albans creamery is at times more than ten tons of butter, the milk for which is gathered from six hundred dairies. Sap from Vermont's rock maples supplies more than half the maple sugar made in the United States. The larger sugar places have two or three thousand trees on them. In St. Johnsbury is a great twelve-acre factory devoted to the making of scales. It is the largest factory in its line in the world. Over one hundred varieties of scales are made; the smallest will weigh a letter, and the largest will weigh a loaded railroad car.

Another widely known manufacture of the state is that of organs for homes and for churches and other public buildings, at Brattleboro. Back in 1835 an inventive Brattleboro genius made and operated a steam carriage on the local roads. This was the first horseless carriage ever contrived in America. It was built at a cost of about $600 and was in existence for nearly ten years. Its speed on an ordinary carriage road was a dozen or more miles an hour. However, so many horses were frightened that during the latter part of its career the selectmen forbade its using the public roads unless a boy ran ahead of it blowing a horn. One day it plunged down a bank and there stayed a number of years before it was carried off by a junk man. In the vicinity of Brattleboro the famous English author, Rudyard Kipling, abode for a time, and while a resident wrote "Captains Courageous," a story of the Gloucester fishermen which ranks among the best of boys' books.

In the town of Sharon, a few miles north of Woodstock, Joseph Smith, founder of the Mormon religion, was born in 1805, and there spent his boyhood up to the age of ten, when the family moved to western New York.

One noteworthy source of wealth in Vermont is its quarries. Limestone is gotten out for building purposes and also to be burned for lime. Granite of different textures and colors is

quarried at various places, and in and about Barre this industry employs many thousands of workers. Some of the most important of American slate quarries are in Vermont. Marble began to be quarried in the state soon after the Revolution, and over half the marble used in the country since that time has come from there. The great quarries of West Rutland were first worked in 1836. Before that the site of the quarries had been a barren sheep pasture, shaggy with stunted evergreens. The wealth this pasture roofed was undreamed of, and the whole tract was so cheaply valued that it was once exchanged for an old horse worth less than a single one of the huge blocks of marble that day by day are hoisted from the quarry depths. In the northwestern part of the state beautiful variegated and black marbles are quarried.

Among the Vermont towns are scarcely any which do not contain some mountain or lofty hill whence a delightful view can be obtained. The heights are nearly all clothed with verdure from base to summit, and the name of the state, derived from two French words, Verd Mont, which mean Green Mountain, is very appropriate. Mt. Mansfield, with an altitude of 4406 feet, is the highest point in the state. It is about twenty miles northwest of Montpelier.

Bow Arrow Point between North Hero and South Hero Islands

MINOT'S LEDGE LIGHTHOUSE

IV

Massachusetts

On the 21st of December, 1620, while the *Mayflower* lay at Provincetown, an exploring party, consisting of twelve Pilgrims and six sailors in the ship's shallop, stepped out of their clumsy boat on to Plymouth Rock — a lonely bowlder brought thither by an ancient glacier. The vicinity, with its excellent springs, impressed the explorers favorably, and there the Pilgrims started a settlement of rude log cabins. Early in their stay, Francis Billington climbed to the top of a tree and discovered a broad pond about two miles from the hamlet. He mistook it for a great sea, and it has been called Billington Sea ever since. Several times during the winter the settlers observed in the distance smoke and fires which could have been made only by Indians.

In April an Indian named Squanto visited them. He could speak their language, for his home was in Maine, where he had met many English fishermen, one of whose captains had carried him off across the ocean. Another captain brought him back and left him on Cape Cod. The Pilgrims

were suffering for lack of food, and Squanto went to catch eels for them, and showed them where to fish. Besides, he taught them to plant corn when the new oak leaves were the size of a mouse's ear, and to place three herrings for fertilizer in each hill with the seed. Through him a treaty of peace was made with Massasoit, the Indian sagamore of the region.

Plymouth Rock

There was much sickness among the settlers, and half the little band died the first winter. One of the notable men of the colony was Capt. Miles Standish. He was robust, active, and daring, yet so short of stature that a neighbor, in a moment of anger, called him "Capt. Shrimp." His wife died soon after arriving at Plymouth, and the captain presently decided to court Priscilla Mullins. He sent John Alden, a young man who was living at his house, to ask Mr. Mullins's permission to visit his daughter. Mr. Mullins referred Alden to Priscilla, who, when she heard what he had to say, responded, "Prithee, John, why don't you speak for yourself?"

He blushed and bowed and left the house, but soon came on another visit and spoke for himself so effectively that their wedding followed in a short time. Among their many distinguished descendants are the poets Bryant and Longfellow.

In 1623 the Pilgrims were in much distress of mind over a drought that began the third week of May. When the middle of July arrived without rain a day was set apart to pray for relief. It opened clear and hot, but toward evening the sky began to be overcast, and soon "such sweet and gentle showers" fell as caused the Pilgrims to rejoice and bless God. That was the first New England Thanksgiving. Plymouth is now a place of about 10,000 people, but it still retains an attractive savor of the olden times, and it is a favorite summer resort.

About 1624 a young English clergyman named Blackstone became the first settler of Boston. He built a cabin on the west slope of Beacon Hill, and there he lived alone. Apparently he did not care to have near neighbors, for when the Puritans led by Winthrop arrived in 1630 he did not long delay moving, and established a new home in the Rhode Island wilderness. A rude little village had been started at Charlestown the previous year, and there the Puritans settled, but a few months later most of them moved across the Charles River to the Boston peninsula, which they called Trimountain or Tremont, a name suggested by a three-peaked hill near its center. This name was soon changed to Boston in memory of an old town in England where some of the settlers had lived. They called their colony the Massachusetts Bay Colony. Massachusetts was the name of a local tribe of Indians. The word means

Provincetown on Cape Cod

"Land of Great Hills." Boston's excellent harbor and central location caused it to early develop into the leading town in New England, politically and socially.

The Boston Public Library

The pioneers put a beacon on the central hill's highest peak to give a night alarm when there was need. Since then the old three-peaked height has been much reduced by grading, and now it all goes under the name of Beacon Hill. On this hill stands the State House, occupying land that was formerly a part of the cow pasture of the wealthy merchant and patriot, John Hancock. Wherever you go into the city suburbs, if the day is clear and sunny, you can see the building's gleaming gilded dome. The front, which is considered a fine example of the architecture of its day, was finished in 1798.

The Old State House

A book by Oliver Wendell Holmes, one

of the famous literary men who have lived in the city, contains the statement that "Boston State House is the hub of the solar system." People said, "If that is so, then Boston itself must be the hub of the universe;" and the place has been known as "the Hub" ever since.

The State House fronts on a corner of Boston Common, which, with its mild hills and hollows and noble elm trees is the pride of all Bostonians. It has served as a pasture and as a parade ground for the militia. On it pirates have been hung, and Quakers have suffered the death penalty, and duels have been fought.

Not far away are several historic churches. One of them is the Park Street Church, whose slender spire overlooks the common from "Brimstone Corner." In it our national hymn, "America," was first sung in 1832 as part of the program for the celebration of the 4th of July. A little beyond is King's Chapel, where the British officials and loyalist gentry worshiped in colonial days. Close to each of these buildings is an ancient cemetery with its lowly gray stones. Some say that in the King's Chapel Churchyard the notorious pirate, Capt. Kidd, lies buried, and that if a person will visit his tomb there at midnight, tap on it three times, and ask in a whisper, "Capt. Kidd, for what were you hung?" the pirate will answer nothing. At the corner of Washington and Milk streets is the Old South Meetinghouse. When the British were besieged in the town they turned the building into a riding-school.

Just across Milk Street from this church there used to be a little two-story wooden dwelling in which Benjamin Franklin was born in 1706. He was the fifteenth of his father's seventeen children. While serving an apprenticeship to an older brother who was a printer, he secretly left home and made his way to Philadelphia, where he won fame and fortune. Three other great Americans born in Boston were Emerson,

the philosopher, and Parkman, the historian, and Edgar Allan Poe, one of the most original of our poets. Alexander Graham Bell, the inventor of the telephone, was a professor in Boston University when the first telephone line was used in April, 1877. This line was three miles long and connected Boston and Somerville.

The Harvard Gates

One of the quaintest of the city buildings is the Old State House. It is at the head of what was, in colonial days, King Street, where were located the stocks, pillory, and whipping-post. Within a stone's throw of it occurred the Boston Massacre in March, 1770, when a squad of

Longfellow's Home, Cambridge

British soldiers fired on an unarmed mob, killing four men and wounding seven others, two of whom afterward died.

A few streets northerly is Faneuil Hall, "the Cradle of Liberty," so called because in it the colonists held many public meetings when the struggle with the mother country was approaching. It has always been a combination of hall above and market below from the time that Peter Faneuil built and presented it to the town in 1741.

The House of Seven Gables, Salem

Boston's early settlers established at the north end of the peninsula a village which was quite distinct from the one near Beacon Hill. This is a crowded foreign section of the city now, but here still stands the Old North Meetinghouse, famous for its connection with Paul Revere's Ride.

Charlestown is now a part of Boston, and is connected by bridges with the peninsula. On one of its heights rises the granite shaft of Bunker Hill Monument, which commemorates the famous battle fought there. The corner stone was laid by Lafayette in 1825, and Daniel Webster was the orator of the occasion, as he was also when the completion of the monument was celebrated in 1843. Inside of the shaft is a spiral stairway of 295 stone steps up which one can climb to the top. Samuel Morse, the inventor of the telegraph, was born at Charlestown in 1791.

Within a ten-mile circle drawn around Boston dwell half the inhabitants of the "Old Bay State," a name derived

from that of the Massachusetts Bay Colony, and they constitute one fourth of the entire population of New England. The older business part of the city is a maze of narrow crooked streets which are said to follow the routes of the old lanes and cow paths that were made when the place was a country village. In the adjacent region are many beautiful suburban towns. The finest of these is Brookline, which is a paradise of splendid estates. In the early days its name was Muddy River, and the Boston merchants pastured their swine and cows there in summer.

A spark, snapped from a furnace in the business section of the city, started a fire in November, 1872, which burned over sixty-five acres, caused thirteen deaths and a property loss of $70,000,000. On the outer side of Boston Harbor is Nantasket Beach, the most popular of the city's seaside resorts. The harbor is dotted with islands. On one little islet near the entrance, known as Nix's Mate, there used to be a gibbet especially for pirates. The most famous episode in the harbor's history is the Boston Tea Party. On the night of December 16, 1773, a hundred men befeathered like savage warriors, and their faces smeared with soot, boarded three vessels recently arrived from across the ocean with cargoes of tea, broke open the chests, and threw them overboard. This was done as a protest against Britain's arrogant methods of taxation.

The Shore at Marblehead

One of the old towns which has been annexed to Boston is Roxbury, whose first minister was John Eliot, "the Apostle of the Indians." He learned their language and translated the Bible into their tongue. In West Roxbury was the famous communistic Brook Farm, where some of the most notable men and women in America once lived and cultivated the land and their brains. People used to laugh at the spectacle of rustic philosophers hoeing out wisdom and potatoes at the same time, and the neighbors said that the Brook Farmers once raised 500 tufts of burdock, mistaking them for cabbages.

Next to Plymouth the oldest place in New England is Salem, the "Witch City." It was begun in 1626 by a little band of English farmers and fishermen, who moved to the spot from the bleak shores of Cape Ann. Two years later they were joined by Captain John Endicott and a hundred adventurers from England. For a long time Salem was a great seaport and a center for the coast fisheries. One of the most interesting of the city's colonial relics is the little church, 17×20 feet, built for Roger Williams, who came to the settlement to be its pastor when it was three years old. Another building that all strangers wish to see is "The Witches' House." This was the residence of one of the judges before whom those accused of being witches appeared for examination. The witch delusion created more turmoil at Salem than anywhere else in the colonies, yet its tragic period there lasted only about six months in the year 1692. During that period nineteen persons were hung, and a well-to-do farmer, eighty-one years old, was put to death by placing heavy stones on his body. Nathaniel Hawthorne was born at Salem in 1804 in a house that still stands, and not far from that is the House of Seven Gables to which the family moved when he was four years old. In his manhood he was collector of the port for a time, and daily labored at

the custom house, though it was said that "he never could add up figgers." Like many another American city, Salem has had its great fire. This started in a leather factory in June, 1914. Several persons were burned to death, others died from excitement, and 20,000 people were left homeless.

Only a few miles from Salem is Marblehead, on a bold headland. Its inhabitants were fishermen for many generations, but latterly the town has become a manufacturing center and summer resort.

Old Mother Ann, Cape Ann

A more important outthrust of the coast is Cape Ann, which Capt. John Smith called Tragabigzanda in honor of a Turkish lady whose slave he had been in Constantinople. Back of Cape Ann is Gloucester, New England's greatest fishing port, and a place of notable picturesqueness and interest. Another charming old coast town is Newburyport at the mouth of the Merrimac. Of its various famous residents probably "Lord" Timothy Dexter is most fascinating to visitors, a fact not wholly to the liking of its citizens. He came there after winning prosperity as a leather dresser in Charlestown, and bought a mansion which he painted in gaudy colors, and whose roof he adorned with minarets surmounted by a profusion of gilt balls. In front of the house he erected rows of columns, and on each placed an image carved in wood. There were fully forty of the effigies, and they included Indian chiefs, generals, philosophers, politicians, and statesmen, with now and then a goddess of Fame or Liberty, and a number of lions. One was of

Dexter himself, inscribed, "I am the Greatest Man in the East."

On the coast south of Boston is Quincy, the birthplace of two presidents of the United States, John Adams, and his son, John Quincy Adams. The simple farmhouses in which they were born are only a few rods apart. Nearly all the southwestern part of the town is a mass of granite rock, and here is one of the oldest granite quarries in the country. America's earliest railroad was built from this quarry, three miles, to tidewater in the Neponset River. Wooden rails were laid on blocks of stone, and covered with strips of iron. A single horse could draw twenty tons of granite on one of the wagon-like cars. The first trip was made in 1826. At Quincy are the great Fore River shipbuilding works.

A Nantucket Windmill

In the neighboring town of Hingham is the oldest house of worship in the United States now in use, erected in 1680. It is called the "Old Ship" because ship carpenters did the framing. There is a central belfry which used to serve as a lookout station, and the bell rope dangles down to the floor in the center aisle of the church.

Eight miles southeast of the entrance to Boston Harbor, and a mile and a half from land, is the famous Minot's Ledge lighthouse. The first lighthouse on the ledge was a dwelling supported at a height of fifty-five feet on nine solid iron shafts that were ten inches in diameter. This stood only two years. In the early spring of 1851, during one of the heaviest gales known on the coast, great quantities of ice adhered to the supports, and it was completely wrecked.

The keeper and his two assistants lost their lives. The present structure is a tapering round tower of dovetailed granite blocks that are made still more secure by being bound together with heavy iron pins.

As we go on down the coast we come to Greenbush, where was born, in 1785, Samuel Woodworth, author of "The Old Oaken Bucket," and where can be seen his boyhood home with its ancient well-sweep. At Marshfield dwelt Daniel Webster in later life, and there he died and was buried in 1852. He had a domain of over 2000 acres, which he made one of the best farms in the country. All the buildings on the place associated with him have been destroyed by fire, except a little study which he sometimes used.

The oddest feature of the Massachusetts coast is Cape Cod, which projects into the sea like a man's bended arm with the fist clenched. It is composed almost entirely of sand to a great depth. Bartholomew Gosnold gave it its name because of the great number of codfish he found in the adjacent waters. Trees do not flourish on the Cape, and such woodlands as exist are apt to be fire-ravaged, and so thin that you can see the horizon through them. One thing for which the Cape is known far and wide is cranberries. The vines require a great deal of water, and the unsightly and apparently worthless bogs are best adapted to their culture, but require much laborious preparation. Picking begins in mid-September and lasts about six weeks. The Cape lies very open to the winds, and the buffeting of the fierce sea gales is evident in the upheave of the sand dunes and the landward tilt of the exposed trees. The villages are for the most part on the low-lying and more protected inner side. A ship's canal eight miles long was completed at a cost of $12,000,000 in 1914, across the neck of land where the Cape joins the mainland. The most attractive place on the Cape to tourists is Provincetown at the jumping-off tip. It has an ancient old-world

look, due to its narrow streets; and the gray fish-shanties and storehouses that line the waterside are odorous of the sea. The *Mayflower* lay in Provincetown harbor for several weeks after it crossed the ocean, and while there Peregrine White was born on board. His name commemorated the fact that the Pilgrims were still on their peregrinations. The General Court later honored this first English baby born in New England by giving him two hundred acres of land.

South of Cape Cod is the island of Nantucket, with its quaint town of the same name. It has a length of fifteen miles and an average breadth of four miles. For the most part it is a wind swept moor diversified with lagoons and ponds. The town huddles about a harbor on land that terraces steeply upward. Some of the streets are paved with cobble-stones, and nearly all are both crooked and narrow. The first settler bought the island from the Indians for a small sum of money and two beaver hats. At one time the majority of the inhabitants were Quakers. The place developed into the chief whaling port of America, and its whaleships visited all the waters of the globe. On one of the sand hills back of the town is an old windmill which was built in 1746 and used till 1892.

A large and interesting neighboring island is Martha's Vineyard, which is said to be the favorite coast resort for school-teachers.

One of the most important places adjacent to Boston is Cambridge, where is located our country's oldest college, established only six years after Boston was settled. Two years later a young clergyman, John Harvard, died, and left his books and half his estate to the college, which forthwith was called by his name. The university now has nearly 1000 instructors and about 6000 students, and a library that numbers over 1,000,000 volumes. It was at Cambridge, on the 3d of July, 1775, that Washington, after

an eleven days' journey on horseback from Philadelphia, assumed command of the American army. The day was warm and he and his officers took part in the ceremony sheltered from the sun by an elm which still stands, though much decayed and shattered. Washington had his headquarters at Cambridge in a large dignified mansion, which later became the home of the poet, Longfellow. A neighboring colonial dwelling was the birthplace and lifelong home of James Russell Lowell. Another Cambridge-born notable was Richard Henry Dana, who, when a youth of nineteen in 1834, undertook a voyage to the Pacific as a common sailor, and recorded his experiences in that sea classic, "Two Years Before the Mast."

A Connecticut River Ferry-boat

At the near-by town of Lexington was shed the first blood of the Revolution, April 19, 1775. On the night before, Paul Revere, watching from Charlestown, had seen two signal lanterns displayed in the belfry of Boston's Old North Church, and had ridden away to rouse the country. It was he who brought the news to Lexington that the British were coming, and when they arrived at dawn they found the minute men on the little green to oppose them. After the skirmish there the British kept on to Concord, where occurred the fight at the North Bridge and they began their disastrous retreat. In its associations with great writers Concord is the most famous town in the United States. Emerson lived for two years in the Old Manse, which had been the dwelling of his grandfather, the Concord minister, and then he became

a permanent resident in a cheerful stately house on the opposite outskirts of the village. Hawthorne came to make his home in the Old Manse in 1843, and later bought and occupied another Concord house which he called the "Wayside." His next neighbor to the south was Ephraim Bull, the originator of the Concord Grape. His nearest neighbor in the other direction was Bronson Alcott, who called his dwelling "Orchard House," and whose daughter Louisa wrote there several of her famous books for children. Thoreau, the nature writer, was born at Concord in 1817. Once, in order to prove that a person could provide himself with food and other necessaries and live comfortably, and yet have plenty of time for enjoyment, he put up a cabin in the Concord woods beside Walden Pond, and dwelt in it for two years.

Waltham is famous for its watches all over the civilized world. The business began there in 1854 with the employment of 90 people, whose output was five watches a day. Now 4000 persons are employed, and produce daily 3000 watches. Fully half the nation's shoes are made in Massachusetts. Lynn is the leading city for this industry. Lowell, on the Merrimac River, is called the "Spindle City" because of the great number of spindles in its big cotton mills. Down the river is Lawrence, another big mill city. Still farther down the stream is Haverhill, which the Indians raided in 1697, and whence they carried away among their captives Mrs. Dustin, whose adventures are famous. At Haverhill Whittier was born in 1807 in a simple Quaker farmhouse which has been preserved.

The greatest group of cotton mills in the United States is at Fall River, and the neighboring city of New Bedford is also noteworthy for the number and size of its cotton mills. Over half the tacks used by the nation are made in or near Taunton.

The big city of the central part of the state is Worcester. It was much harassed by the Indians in its early days, and for a long time it was so pestered by wolves that the people were deterred from raising sheep. The most extensive wire mill in the world is in Worcester. At Spencer, a few miles west, was born, in 1819, Elias Howe, the inventor of the sewing machine. Eli Whitney, who contrived the wonderfully simple cotton gin, was born at Westboro in 1765. The town in this part of the state which had the severest experience in the Indian wars was Lancaster. A night attack in February, 1676, nearly wiped out the settlement. South of Worcester, near the Connecticut line, in the town of Webster, is a lake with an Indian name of what seems unprecedented length — Chargogagogmanchogagogchaubunagungamaug. It means "Fishing-place at the boundary."

The oldest place in the Connecticut Valley is Springfield, settled in 1636. More than half the town was burned by the Indians in King Philip's War. On State Street was fought a miniature battle in January, 1787, when Daniel Shays, an officer in the recent Revolutionary War, led a rustic army of 1100 men to seize the Springfield arsenal.

Springfield Municipal Group

The city's municipal group with its tall tower is exceptionally striking and interesting. A statue by Saint Gaudens of a typical Puritan going to church with a big Bible under his arm is one of Springfield's finest art treasures. The place has a United States Armory which attained a daily output of 1000 rifles in the Civil War.

Not far distant is Westfield, the "Whip City," whence come 90 per cent of all the whips made in the United States. It is also known as the "Pure Food Town" because of a remarkable crusade that originated there to stop all traffic in impure foodstuffs. Another near-by place that has won a title of its own is Holyoke, the "Paper City," where paper mills particularly abound. As we go north we come to the pleasant city of Northampton. Here is Smith College, and within ten miles are Mt. Holyoke College, Amherst College, and the State Agricultural College. In the hilly farming country westerly the poet Bryant was born at Cummington in 1794. The house there which he made his summer home in later life still stands. Just across a valley from Cummington, in Plainfield, Charles Dudley Warner was born in 1829. His "Being a Boy" is one of the most entertaining descriptions of old-fashioned New England farm life ever written. East of Northampton, on the other side of the Connecticut, is "Old" Hadley, the birthplace of "Fighting Joe Hooker," New England's most notable general in the Civil War. Here, in pioneer days, came two fugitive regicides, Gen. Goffe and Gen. Whalley, who were hidden for years in the home of the Hadley minister. Once, when the town was attacked by Indians while the people were at church, Gen. Goffe hurried to the meeting-house, gave the alarm, and directed the people until the invaders had been routed. Then he vanished, and for a long time afterward the people believed that he was an angel sent by God for their deliverance.

Another valley town which commonly has "Old" before its name is Deerfield. Twice it was practically wiped out by Indians, and the second time many of the inhabitants were carried away captive to Canada in midwinter. In the southern part of the town is a sluggish rivulet known as Bloody Brook ever since several scores of pioneers were slaughtered there by an ambuscade of savages. At Turners Falls occurred another desperate battle with the Indians. Farther up the river is Northfield, which was twice wiped out by the red men.

Hoosic Valley in the Berkshires

The most beautiful of all the counties in the state is Berkshire, on its western border, where mountains and tumbled lesser heights are omnipresent. Portions of the county are the summer playground of millionaires. Farms predominate in other parts, some of them thrifty, and some of them quite otherwise. One of its mountains is Greylock, the loftiest

height in the state, with an altitude of 3505 feet. Somewhat to the east of Greylock is the Hoosac Mountain range, which is pierced by the Hoosac Tunnel, $4\frac{3}{4}$ miles long. The first train passed through the tunnel in 1875. About 10 miles west of the tunnel is Williamstown and its famous college. The chief street of the place is probably unexcelled in America for its rural beauty. A more southerly town is Lanesboro, the birthplace of one of the best known of our humorists, "Josh Billings." At Stockbridge the famous colonial theologian, Jonathan Edwards, settled in 1751 to assist in converting several hundred Indians who lived there. His grandson, the notorious Aaron Burr, spent a part of his boyhood in the town. Cyrus W. Field, who laid the first telegraph cable across the Atlantic, was born in Stockbridge. His father was the minister. At one time the vicinity was such a resort of notable writers that it was called "a jungle of literary lions." Among the rest was Hawthorne, who came in 1850 to dwell with his family in a little red house in Stockbridge just over the line from Lenox. While there he wrote "The Wonder Book," which boys and girls have read with delight ever since. Stockbridge and Lenox are both famous summer resort towns, and there is not a hilltop nor a valley in the latter place but has its splendid mansions and far-flung attendant gardens.

Massachusetts people are popularly called "Bean-eaters" from an old-fashioned New England habit of making a regular Sunday meal of baked beans prepared on the day before to avoid Sabbath labor.

The Ancient Gristmill at New London

V

Connecticut

In the autumn of 1633, men in a little vessel from Plymouth sailed up the Connecticut and built a trading-house at Windsor. Within two years settlements had been started at both Windsor and Wethersfield, and a few months later Hartford was founded by a party of sixty men, women, and children who marched overland from the vicinity of Boston, driving their cattle and swine before them. About this time Lieut. Lion Gardiner with thirty men built a wooden fort and some houses at the mouth of the river, and called the settlement Saybrook. The Indians went on the warpath in the autumn of 1636 and captured two Saybrook men who had gone out hunting wildfowl, and the cows sometimes returned from pasture with arrows sticking in their sides. The fort was beleaguered through the winter. In April the Pequots killed

© Kalkoff Co. N. Y.

Saybrook Point Light

nine of the English at Wethersfield, and carried away two maidens captive. This roused the colony to send ninety men against the foe. The force was accompanied by seventy friendly Mohegans who made a foray at Saybrook and brought in five gory Pequot heads and one wretched prisoner. The Mohegans killed their prisoner that night and ate him while they danced and sang round a large fire they had kindled.

The expedition went by water to Narragansett Bay and obtained the help of two hundred local warriors. Then it returned by land to where four hundred or more of the enemy were in a palisaded fort on what is still known as Pequot Hill near the Mystic River. A night attack was made, and the assailants swarmed into the fort and set fire to the wigwams. All the Indians except seven were killed or burned. The rest of the tribe concluded to emigrate beyond the Hudson. They traveled along the shore in order to get a daily supply of food by digging shellfish, and the English followed them. Near Guilford a Pequot chief and some companions, when closely pressed by their pursuers, swam across the harbor from the cape on its eastern side. But as they landed they were shot by some Mohegans in ambush. The victors cut off the head of the Pequot chief and lodged it in the branches of an oak, where it stayed for years. Since then the spot has been called "Sachem Head." The fugitives' power for

mischief was finally destroyed a few miles west of Bridgeport where they took refuge in a swamp. Those who were not scattered or dispersed in the fight there were captured and made slaves.

Tobacco has always been an important Connecticut crop, especially on the fertile lowlands where the first settlers established themselves. Its cultivation was officially encouraged as far back as 1640, but its use was forbidden to any man under twenty-one, unless he obtained a certificate from a physician that tobacco was good for him. No one was allowed to smoke or chew on the streets or in other public places. The industrial importance of the state is chiefly one of manufactures. Brass goods constitute fully one-quarter of the whole in value, and Waterbury is the most notable center of the industry in America. The clock with brass works was invented in 1837, and the excellence and cheapness of Connecticut machine-made clocks and watches made them favorites the world over. Tinware began to be manufactured at Berlin in 1740, and a factory for making pins with machinery at one operation was established at Derby in 1835. Thompsonville is famous for its great carpet mills, Danbury is America's leading community for the manufacture of hats, Willimantic is known far and wide for its production of cotton thread and sewing silk, and Meriden is called the "Silver City" because

Outlet of Old Windsor Canal

the making of silver-plated ware has developed into such an industry there. Near Meriden are the "Hanging Hills," flat-topped rocky heights the name of which was suggested by the abruptness of their rise from the valley.

A promising vein of copper was discovered in 1705 at what is now East Granby, sixteen miles northwest of Hartford. Mining operations continued there for nearly three quarters of a century. In 1773 the colony fitted up the abandoned mine for a prison. Its first keeper named it Newgate after a famous prison in London. Cells were prepared along several galleries, the lowest sixty feet from the surface. It was an uncanny place. One prisoner was a negro murderer who for twenty years was kept chained to the rock in the deepest part of the mine. He slept on a low ledge and drank from a little pool near at hand. Some of the prisoners tramped the revolving stairway of a treadmill that furnished power to grind grain. The prison continued in use until 1827. Even now it is a fascinating place to visit.

New Haven, the "Elm City," is the largest place in the state. It was settled in 1637. Not quite a quarter of a century later Goffe and Whalley, who had been members of the court that condemned Charles I of England to death, arrived in New Haven. A price had been put on their heads, but the people of the town sheltered them, at first in their own homes, and then in a cave on top of West Rock, a steep crag about two miles from the town. Later the regicides spent three years in Milford, and finally fled by night to Hadley in Massachusetts. New Haven is the home of Yale University, founded in 1700, one of the oldest and largest of American educational institutions. At the outbreak of the Revolution Benedict Arnold was a New Haven druggist and bookseller.

The 19th of May, 1780, was the famous "Dark Day." The Connecticut Legislature was in session in the old State

House on New Haven Green when the sudden darkness fell. Many believed the Judgment Day had arrived. In the midst of the excitement a motion was made to adjourn. Then Col. Davenport rose, and said: "I am against an adjournment. If this is not the Day of Judgment, there is no cause for adjournment. If it is, I choose to be found doing my duty. I wish, therefore, that candles may be brought and we proceed to business."

A Clock Tower in a Hartford Park

The darkness began in the middle of the morning and continued the rest of the day. Persons were unable to read common print or to tell the time of day by their clocks and watches. The birds sang their evening songs and became silent, and the fowls retired to roost.

The New York and New Haven Railroad has its main offices and construction and repair shops in the city, and gives support to a tenth of the people. Charles Goodyear, the inventor, was born at New Haven in 1800. He spent ten years experimenting with rubber to make it available for

The Green at New Haven

waterproof shoes, clothing, and other articles before he attained success.

Another great industrial coast city is Bridgeport. This was the home of P. T. Barnum, who was born at Bethel, about 20 miles northwest, in 1810. His "Greatest Show on Earth" had a world-wide fame, and the successor to his circus still has its winter quarters in the city. "Gen. Tom Thumb," one of the notable attractions of the Greatest Show, was born at Bridgeport in 1838. When first exhibited he was less than two feet high and weighed sixteen pounds.

In a rocky glen at New London is a gristmill erected in 1712. It has a great outside waterwheel and continues to grind as of old. The town fared badly in the Revolution, for in September, 1781, Benedict Arnold, whose birthplace was only fourteen miles distant at Norwich, arrived with a British fleet, and burned the town's dwellings, warehouses, and shipping.

The sheltered waters of Long Island Sound favor the growth of oysters, and many people are engaged in planting oyster beds and dredging for oysters along the entire Connecticut coast.

Hartford, the capital of the state, is a great trading and business center at the head of navigation on the Connecticut. It is noted for its important manufactures and big insurance companies, and, scarcely less, for its many parks, fine trees, and handsome residences. One of the most famous episodes in its history was the attempt in 1687 of the British colonial governor, Andros, to seize Connecticut's charter, which his government had concluded was too liberal. He came with 60 soldiers to enforce his will, and the colonial assembly met him in the meeting-house. Deliberations had continued into the evening, when the candles were suddenly blown out, and Capt. Wadsworth of Hartford took the charter from the table and hurried outside, where he hid the precious docu-

ment in a big hollow oak tree near by. When a new king came on to the British throne two years later, Connecticut resumed its government under the old charter. The oak survived until it was overthrown in 1856 by a summer storm. Hartford is indebted for one of its most important industries to Samuel Colt, who was born there in 1814. At the age of sixteen he ran away to sea, and while voyaging to India he made a wooden model of what later became that favorite weapon, Colt's Revolver. "Mark Twain," the humorist, wrote most of his notable books while a Hartford resident.

Noah Webster of dictionary fame was born at West Hartford in 1758. He began work on his dictionary while living in New Haven forty years later, and died in that city at the age of 85 while busy on a second revision. The greatest of colonial theologians, Jonathan Edwards, was born in 1703 at South Windsor, where his father was the minister. He was the only boy among eleven children. The girls all grew to a height of six feet, and their father used to speak of them jocularly as his sixty feet of daughters. At Litchfield were born Henry Ward Beecher and his sister, Harriet Beecher Stowe. The latter taught school in Hartford for a time, and in 1864 became a permanent resident of that city. Only a few miles northeast of Litchfield, John Brown, the militant Abolitionist, was born in 1800 at Torrington.

Bear Mountain, Salisbury

One of Connecticut's heroes of the Revolution was "Old Put," as Gen. Israel Putnam was affectionately called. He was born at Salem, Massachusetts, in 1718, but went as a

young man with his wife to what is now the village of Brooklyn in the eastern part of Connecticut. Many sheep were kept in the region, and these suffered from the ravages of a certain she-wolf. Putnam and some neighbors followed her trail after a light early fall of snow to a den in the rocks where they attempted unsuccessfully to smoke her out. Finally, about midnight, Putnam descended into the cave with a torch to investigate, and shot the wolf dead. News of the Battle of Lexington reached Putnam while he was plowing with oxen in an outlying field. He promptly left the oxen in care of one of his boys, mounted a horse on which he had ridden to the field, and dashed away toward Boston. During the war, while at Greenwich in the southwest corner of the state, he stationed some troops on a steep hill near a little church. Thence they fired several well-directed volleys at a large British foraging party and retired. But he lingered until the British cavalrymen were close at hand, then galloped down a path which was so precipitous that not one of them dared make such a hazardous descent.

The martyr hero, Nathan Hale, was born at Coventry in 1755. When the Revolution began he at once joined the army and soon attained the rank of Captain.

Up in the northwestern part of the state is Bear Mountain, the highest point in Connecticut, with an altitude of 2355 feet. The name of the state is a combination of Indian words which mean "the river with the long tide." This phrase refers to the tidal rise and fall of the water in New England's longest river as far as the Enfield Falls above Hartford. Popular nicknames for the state are the "Land of Steady Habits" and the "Wooden Nutmeg State." The latter was bestowed because of its inhabitants having such a reputation for shrewdness that they were jocosely accused of palming off wooden nutmegs on unsuspecting buyers.

Sheep near Newport

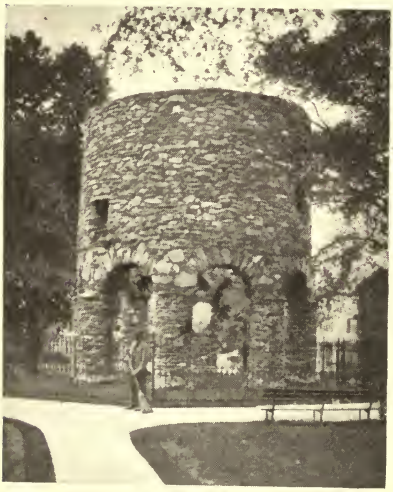
VI

Rhode Island

"Little Rhody" is the smallest state in the Union, and it is the most thickly populated. There are more than five hundred persons to the square mile, while Nevada has less than one to the square mile. The settlement of the state was begun in 1636 by that famous Puritan preacher, Roger Williams, whose preaching at Salem had aroused such opposition that he had been banished from the colony. To escape his persecutors he left home at night in midwinter and fled alone through the deep snow to his Indian friend, Massasoit, with whom he stayed until spring. Then he and five of his Salem flock made their way to Rhode Island and started a settlement which they called Providence. This is now the capital of the state, and the largest city in New England except Boston. The sea cuts deeply into Rhode Island, and there are good harbors near the falls on the streams that empty into the upper end of Narragansett Bay. The combination of abundant water power and a convenient

situation for sending and receiving goods both by water and by land, has resulted in developing a manufacturing community that for its size is unrivaled in the value of its product. The first successful cotton mill in America was started at Pawtucket in 1790. In this same vicinity are now some of the largest cotton mills in the world.

Among the leaders in the Revolution the general who, next to Washington, did his country the greatest service, was Nathanael Greene. He was born in 1742 at Warwick, 10 miles south of Providence. Twenty miles farther down the shore of the bay, at North Kingston, was born in 1756 Gilbert Stuart, one of the greatest of American painters, whose portraits of Washington and other distinguished Americans could hardly be surpassed in lifelikeness and charm of color. South Kingston was the birthplace of Oliver Hazard Perry, commander of our fleet in the famous Battle of Lake Erie in the War of 1812.



THE OLD NEWPORT MILL

Among Rhode Island's important summer resorts are Newport, Narragansett Pier, Watch Hill, and Block Island. The first is the most famous fashionable resort in America. It is on an island in Narragansett Bay. The Indian name for the Island was Aquidneck, which means the "Isle of Peace." It is about 15 miles long, but for the most part very narrow.

The early settlers called it Rhode Island, probably because it was in a bay that furnished good anchorages. The word rhode, or r-o-a-d, as it is more correctly spelled, is used by sailors to designate just such an anchoring place. Aquidneck's first settlers came in 1636 as the result of a violent theological dispute in Boston caused by the teachings of Mrs. Anne Hutchinson.

The State House, Providence

Newport first won fame as a slave port — the greatest in America. For a long time its ships carried 1800 hogsheads of rum annually to Africa to be exchanged for negroes, gold dust, and ivory. Slaves were owned for domestic servants by every well-to-do family in the town. At the beginning of the Revolution Newport was commercially more important than New York. The British occupied it for three years and left it only a shadow of its former self. Nor did it recover until the middle of

On the Seaward Slope of Mt. Hope

the next century, when a wave of fashion swept into the old place. Its attractions were a salubrious climate without extremes of heat or cold the year through, wide ocean prospects from its cliffs, extensive bathing beaches, and a delightful historic afterglow. In one of the city parks is the famous "Old Stone Mill," which was probably a windmill erected by an early governor about 1675, but which some claim was built by the Norsemen hundreds of years before Columbus discovered America. Longfellow, in his well-known poem, "The Skeleton in Armor," makes it the home of a bold Norse sailor and his bride. When the lady died the husband buried her under the stone tower and killed himself by falling on his spear.

Birthplace of Gilbert Stuart, North Kingston

A Newport Mansion

A little beyond the north end of Aquidneck, on a mainland peninsula, is Mt. Hope, the dwelling-place of that most famous of New England Indians, King Philip. His village was at the foot of a rude crag where there was a good spring,

and where it was sheltered from the rough northwest winds. He began his war against the whites in 1675, and many an exposed English village was wiped out, and hundreds of settlers' lives were sacrificed. Late that year the greatest battle of the war was fought in the southern part of Rhode Island, not far from Kingston, where nearly 2000 Indians, including women and children, had taken refuge on a palisaded piece of rising ground "in the middle of a hideous swamp." There they were assailed by 1100 whites and 150 friendly Indians in a snowstorm on December 19. The stronghold was destroyed, many of the savages were killed or perished in the flames, and the rest were fugitives in the winter woods. The next summer, while Philip with a few followers was encamped near Mt. Hope, the whites surprised and slew him, and the spot where he fell has been marked by a stone.

Twelve miles off the coast is that popular resort, Block Island, about eight miles long and three wide. It gets its name from Adrian Block, a Dutch navigator who visited it in 1614. When the first English families settled on the island a half century later, there were about four hundred Indian inhabitants. The island has one great pond and ninety-nine small ones. The largest stream is only a rivulet. A curious tradition of the island is that of the "Dancing Mortar." This mortar was a section of a tree fourteen inches long and ten in diameter, and hollowed out at one end so that corn could be pounded into meal with a stone pestle. After the original owner died the mortar won fame by dancing around the room. It would throw itself on its side and roll to and fro, then right itself and hop up from the floor several times in succession, and perform various other strange antics. The first Block Island hotel was opened in 1842, but not until thirty years later did the island develop into the popular summering place it has now become.

The highest point in Rhode Island is Durfee Hill, which rises eight hundred and five feet above the sea level on the northwestern border of the state. The people are popularly called "Gunflints," a name applied because of the common use of gunflint muskets taken from garrets in the Dorr Rebellion of 1842.

Mohegan Bluffs, Block Island

The Statue of Liberty

VII

New York City

In 1614 a few Dutch traders established themselves on Manhattan Island, and twelve years later the entire island was bought from the Indians for trinkets worth $24, a sum that is less than one tenth of what has been paid in recent years for a single square foot. The name of the island is an Indian word which means the "Place of the Whirlpool," and refers to the rushing tumult of the waters at Hell Gate. The city continued to be all on the island until 1874, when the Harlem was crossed. In 1898 its limits were enlarged to include Brooklyn, Staten Island, and the Bronx. This raised the population to more than 3,000,000, or about half that of the entire state. New York to-day is the largest city on the globe, the greatest industrial city, and contains the loftiest buildings. It is the melting pot of nations. People from all over the world have come there to make their homes, and many strange languages are spoken.

On Bedloes Island, in the harbor, the Statue of Liberty greets and welcomes every incoming ship. The idea of this colossal statue originated with the French sculptor, Bartholdi, in 1871, and the people of his country subscribed more than $250,000 to pay for it, that they might present it to our nation. They desired that this gigantic statue representing Liberty enlightening the World should stand "on the threshold of the New World in the unequaled harbor of New York." It was dedicated in 1886. No other statue is so high. To the top of the torch is 151 feet. The thumb is twelve feet in circumference. Inside are elevators and stairways for ascent into the head, which can accommodate forty persons at a time. The torch and diadem are lighted by electricity. The statue is composed of 300 bronze plates that average in weight three quarters of a ton.

At the southern tip of Manhattan Island is a small park called the Battery. The name is accounted for by the fact that when the town had been settled about seventy-five years rumors of war between France and England caused the New Yorkers to build a platform on the rocks that jutted out of the water in the vicinity, and to place there a battery that would command the waterways on both sides. The low, circular, widespreading building on the Battery now used as an aquarium was originally erected to protect the city in the War of 1812. It was called Fort Clinton. The rocks on which it was built were so far from the shore that it was reached by a bridge two hundred feet long. In 1822 the fort was turned into a place of public amusement under the name of Castle Garden. Here Lafayette was entertained as the guest of the nation in 1824, and here were held great political meetings at which Daniel Webster and other notable orators and statesmen appeared. In 1847 it became one of the most important playhouses of New York, with a seating capacity of over 6000. Three years later Jenny

Lind, the "Swedish Nightingale," made her début on its stage. After the golden period of music and drama the building served as an immigrant depot from 1855 to 1891, when it was transformed into an aquarium.

The Aquarium on the Battery

The oldest city thoroughfare is Pearl Street. In the early days it was right at the water front, and on the landward side was a straggling row of quaint Dutch houses. Where this street is joined by Broad Street stands the oldest landmark in the city, Fraunces's Tavern, erected in 1739. Here Washington took leave of his officers at the close of the Revolution.

Wall Street and Trinity Church

Not a single building has come down to us from the Dutch period, but we at least have that bit of park — Bowling Green — which lay immediately in front of Fort Amsterdam. Between the high buildings on the west side of Broadway, at No. 55, is a narrow passage that used to be called Tin Pot Alley. Marketfield Street, which

THE MUNICIPAL BUILDING

the Produce Exchange now almost covers, was known as Petticoat Lane, because it contained the residences of some of the people of fashion. The present Nassau Street was Pie-womans Lane. A one-time respectable dweller on Liberty Street was Capt. Kidd, whose enduring fame is unrivaled among all the freebooters who terrorized the sea.

Wall Street, which the towering buildings on either side have made a narrow canyon, is the financial center of the United States, and here is the Stock Exchange, the world's greatest market for stocks, bonds, and securities. There is a notable statue of Washington that stands, as the poet Stedman says,

"Just where the Treasury's marble front
Looks over Wall Street's mingled nations;
Where Jews and Gentiles most are wont
To throng for trade and last quotations;
Where hour by hour the rates of gold
Outrival in the ears of people
The quarter chimes, serenely tolled,
From Trinity's undaunted steeple."

This Sub-Treasury is on the site of Federal Hall in which assembled the first American Congress, and in which Wash-

ington took the oath of office after his first election to the presidency. Wall Street gets its name from a palisaded wall built across the island there at the northern limit of the city in 1652.

At the head of Wall Street on Broadway is Trinity Church, with its quaint churchyard full of crumbling gravestones. It was founded in 1696, but the present building dates back only to 1846. No other church society in America equals that of Trinity in wealth. Among the famous persons buried in the churchyard are Alexander Hamilton and Robert Fulton. In pioneer days a man named Van Dyck had a peach orchard near this spot. One September night in 1655 he fired his gun at an Indian girl who was stealing peaches from the trees and killed her. That roused the savages to seek revenge, and in the warfare that ensued over one hundred settlers lost their lives, and a great deal of property was destroyed.

Woolworth Building

Another orchard of tragic fame was one bordering on Maiden Lane. Some discontented slaves met there in 1712 and set fire to an outhouse. When the citizens ran to extinguish the flames, the blacks fired on them, killing nine and wounding six. Great excitement ensued, the soldiers were called out, and twenty-one slaves were captured. All the captives

were executed, some by hanging, some by burning at the stake, while others were suspended in chains and left to starve.

A short distance up Broadway from Trinity Church is St. Paul's Chapel, which was begun in 1756 and is the oldest church edifice in New York. Less than a week after the invading British came in 1776, a fire swept away a great part of the western side of the city, including Trinity Church. But St. Paul's was saved, and here the English commander and many soldiers of the king attended service. When the American forces again occupied the city Washington worshipped in this church, and later, while he was in New York as chief magistrate of the nation, he regularly made this entry in his diary each Sunday, "Went to St. Paul's Chapel in the forenoon." One of the graves in the churchyard is that of George Eacker who killed Philip, the oldest of Alexander Hamilton's eight children, not quite twenty years of age, in a duel in November, 1801, just where the great statesman himself was killed a few years later. The quarrel grew out of a Fourth of July speech by Eacker in praise of Burr and reflecting on Alexander Hamilton.

Near by is the Equitable Building, the largest office building in the world. On its forty floors are 2300 offices, which are the business home of 15,000 people. The Equitable Building that preceded this one on the same site was destroyed by a great fire in January, 1912.

Washington Irving was born at 131 William Street, in a two-story house between John and Fulton streets in 1783. He was the youngest of eleven children.

One of New York's really handsome older buildings is the City Hall, begun in 1803, and completed nine years later. When the site was chosen, a person would have been considered a wild dreamer who expected the city to spread farther than that uptown. It therefore faced the city lying below it, and the back toward the open country was con-

Washington Arch at Lower End of Fifth Avenue

structed of sandstone, instead of marble like the rest, and left plain and unornamented. In 1890 this sandstone was painted white.

When the Stamp Act was to go into operation on November 1, 1765, a secret association known as the Sons of Liberty assembled that evening with torchlights on the Common, as City Hall Park was then called, and hung on a gallows two stuffed figures, one of the devil and the other of the British official who had the stamps in his charge. The next June they erected a flagpole on the Common. This and several successive poles were cut down by the soldiers, and finally, in January, 1770, when the pole was not only cut down but sawed into pieces, a bloody fight ensued between the people and the redcoats on a hill where now is John Street. That same year the Stamp Act was repealed, and the New Yorkers showed their gratitude by erecting in Bowling Green a leaden statue of King George on horseback. July 9, 1776,

The Flatiron Building

the Declaration of Independence was read on the Common to the American army in the presence of George Washington. After the reading ended, the patriot troops gathered at Bowling Green and pulled down the king's statue, which was later made into bullets for their use.

In front of the City Hall is a tablet sunk into the pavement inscribed with the fact that there, March 24, 1900, the mayor made the first excavation for the underground railway.

Most of the city business is transacted in the neighboring Municipal Building, which ranks among the noblest of New York's skyscrapers.

The Woolworth Building, fronting on the western side of the park, is the tallest office building in the world. Indeed, no structure built by man is higher except the Eiffel Tower in Paris. Its height above the sidewalk is 785 feet, and its lowest foundation on the solid rock of the island is 120 feet below the sidewalk. Its cost was $12,000,000. The man whose name it bears started a five-cent store in Utica, New York, in 1873. When he died in 1919 he had thousands of five and ten cent stores and employed more people than any other one man in the world.

Madison Square

As we go north from the City Hall we come

to Canal Street, so named because originally quite a deep stream flowed there to the Hudson from a pond well back on the island. The Indians paddled up and down the stream in their canoes, and when the city expanded that far, pavements were laid on both sides, and trees and flowers were planted along it.

St. Patrick's Cathedral, Fifth Avenue

At 10th Street, on Broadway, is Grace Church, one of the most famous and architecturally attractive of New York's ecclesiastical structures.

Just east of Union Square on 14th Street is Tammany Hall, the headquarters of a society which was organized for benevolent purposes, but soon developed into a strong political institution. The society took its name from an Indian chief of the pioneer period, and the officers bear the title of sachems, and call their hall a wigwam. The first meeting was held on May 12th, St. Tammany's Day, in 1789.

Peter Stuyvesant, the most picturesque of the Dutch rulers of New Amsterdam, had a country place in the vicinity of 14th Street. It extended from 4th Avenue to the East River, and was known as the "Great Bouwerie." To this farm he retired after New York passed into the hands of the English, and there peacefully dwelt till he died in 1672. A village was formed in the neighborhood of his farm, and a

country path connected it with the city. Later the path was made into a carriage road and extended to Harlem. It was called Bowery Lane. Gradually it developed into one of the most important highways of Manhattan Island, and was a favorite drive for fashionable people, especially when there was sleighing in winter.

The first street railway in America began operating in November, 1832, between the City Hall and 14th Street. Both of New York's great railway stations — the Grand Central at 4th Avenue and 42d Street, and the Pennsylvania at 7th Avenue and 33d Street — are as notable for their architecture as for their size. The latter has perhaps the most imposing interior of any commercial building on the globe. The first railway passenger station in the city was at Chambers Street and College Place, to which point the cars were drawn by horses from 13th Street and 11th Avenue.

Washington Square, at the lower end of 5th Avenue, is laid out on the site of an old burial ground. At the entrance to the Avenue is the splendid Washington Centennial Arch. Fifth Avenue is New York's chief street from the standpoint of wealth and fashion. Electric cars have never been allowed to invade it, and the main means of public conveyance is the omnibus. A bus ride, with a seat on top, is the ideal way to view the resplendent stores of its business section and the magnificent homes of the millionaires farther up.

Morse, whose invention of the telegraph has obscured the fact that he was also a famous painter, was a long time resident at 5 West 22d Street and there died. He spent five years experimenting in his studio before he perfected the telegraphic instrument and alphabet, and seven years more passed before he was able to overcome public derision and skepticism sufficiently to get an experimental line built.

The Flatiron Building at Madison Square, so called on

account of its shape, is twenty stories high. It has a curious effect in increasing the violence of the wind at its apex, so that during gales people sometimes have been whirled off the sidewalk and neighboring plate glass shop-windows have been smashed. The tower of the enormous Metropolitan Life Insurance Building on the east side of the Square has forty stories and a height of 693 feet. Close by is another beautiful tower — that of Madison Square Garden. On the other side of the Square is Saint Gaudens' Farragut, one of the finest statues in New York.

Cleopatra's Needle in Central Park

Just east of 5th Avenue on 29th Street is what is known as "The Little Church Round the Corner," so named because of the refusal of the rector of a neighboring church to officiate at the funeral of an actor and his suggestion that "the little church round the corner" might be willing to conduct the service. At 33d Street is the huge Waldorf-Astoria Hotel, and a few streets farther north the dignified white marble Public Library. Another famous white marble structure is St. Patrick's Cathedral at 51st Street, the largest and most beautiful Gothic church in America. It was begun in 1850 and completed in 1879.

Riverside Park and Grant's Tomb

Columbia Library

The city's theaters congregate thickest at 42d Street, and it is there that Broadway is to a most marked degree the "Great White Way" when resplendent at night with dazzling electric signs and other lights.

In the vicinity of 3d Avenue and 63d Street Nathan Hale, the patriot spy, was hanged on an apple tree, September 22, 1776.

Central Park, the great promenade and open-air resort of New York, was laid out in 1856. It extends from 59th to 110th Street, is a half mile wide, and covers 840 acres. The ground has been transformed from a tract of swamp and rock into a park famous for its varied beauty. On the east side, at 64th Street, is a Zoölogical Garden that most visitors enjoy, especially in winter, when a number of menageries temporarily leave their animals there. On the same side of the park, at 82d Street, is the Metropolitan Musuem of Art. A knoll west of the Museum is occupied by Cleopatra's Needle, an Egyptian obelisk, sixty-nine feet high, from Alexandria, presented by the khedive to the city in 1877. It dates back to about 1500 B.C., several centuries before the time of Moses. On the opposite side of the park, at 77th Street, is the Museum of Natural History.

Riverside Drive, a narrow hillside strip along the Hudson from 72d to 127th Street, affords interesting views of the river, and its highway is one of the finest possessed by

any city. Near its north end is Grant's Tomb, and on the neighboring upland, at 120th Street, the main fight in the Battle of Harlem Heights occurred in a buckwheat field, September 16, 1776. This vicinity has been the site of Columbia University since 1897. The University library is a particularly impressive building.

All the section from 138th to 145th Street near Amsterdam Avenue was once owned by Alexander Hamilton, and there he lived in what was a grand homestead then. The house occupied by Audubon, the naturalist, in his last years is at the foot of 155th Street beside the river. When a commission laid out streets and avenues up to 155th Street in 1807 it apologized for doing so much "laying out," and acknowledged that probably not for centuries would most of these streets be occupied.

Battleground Monument at Fort Washington

On Harlem Heights at 169th Street is the Jumel Mansion built in 1758 by an English colonel who married an American wife that year. At the time of the Revolution he went to England, and the property was confiscated. The house was Washington's headquarters for three months in 1776, and for the rest of the war was occupied by the Hessian Gen. Knyphausen. Then it was a tavern for several years, but

in 1810 was purchased by Stephen Jumel, who had acquired wealth as a coffee planter in San Domingo. He married the daughter of an American sea captain in 1804. She was a youthful widow who had eloped at the age of seventeen to marry her first husband. For a time the Jumels lived in Paris where she became a leader of fashion; and she made their New York mansion famous for the society she gathered round her there. In 1832, a year after Mr. Jumel's death, she married in the drawing-room of this historic house Aaron Burr, then seventy-eight years old; but she soon tired of him, turned him out of doors, and dropped his name. She continued to dwell in the old house until she died in 1865 at the age of ninety-six. The mansion now belongs to the Daughters of the American Revolution.

Brooklyn Bridge

Between 182d and 186th streets, on the highest point of the island, with the Hudson on one side and the Harlem on the other, formerly stood Fort Washington. The British captured it after the Battle of Harlem Heights.

East of the Harlem River at Fordham, in Kingsbridge Road, is a cottage that was the home of Edgar Allan Poe from 1844 to 1849. One of the attractions of this part of

the city is Bronx Park. At the north end are the Botanical Gardens, and at the south end are 260 acres where various of the larger North American quadrupeds have been placed in surroundings that resemble their natural haunts. The bison, for instance, have a range of fifteen acres, and the deer eight acres. Another feature of the Zoo is a granite bowlder weighing thirty tons, so balanced that it can be moved easily by hand.

Soldiers' and Sailors' Arch, Brooklyn

In Prospect Park

In the East River, north of Blackwells Island, is Hell Gate, where the waterway makes a sharp bend and surges through a narrow rocky channel. Sunken reefs made it highly dangerous until they were blasted out.

Of the several bridges across the East River the first has never been excelled in interest and grace. It was begun in 1870 and completed in 1883 at a cost of nearly $15,000,000. For a long

time it was unrivaled among the world's suspension bridges. Its total length, including approaches, is over a mile. The gigantic stone piers rise 270 feet above high water. Four 16-inch steel wire cables serve to support the long span of the 85-foot-wide bridge.

Brooklyn may be said to have begun in 1642 when a ferry was established between it and lower New York. A tiny hamlet that clustered about the landing gradually expanded, but the place continued essentially rural for a long period. In 1759 a large bear visited the farms in South Brooklyn and was pursued to the vicinity of Red Hook, where he took to the water and was shot from a boat. In 1774 a church established under the patronage of Trinity of New York was built with the aid of a lottery. Horse races were run in Brooklyn then, and an innkeeper on Columbia Heights announced a bull-baiting there every Thursday afternoon.

One of the greatest battles of the Revolution was fought in the present heart of the city on August 27, 1776. The Americans lost 2000 in killed and wounded and 1100 in prisoners, and on the night of the 28th, aided by a dense fog, withdrew across the East River. Every manner of craft — yacht, scow, and rowboat — was pressed into service, manned by fishermen and sailors from Salem and Marblehead, and Washington superintended the embarkation.

Brooklyn contains fully six hundred religious edifices and is popularly known as the "City of Churches." It is also called the "Dormitory of New York," so many of its residents are New York business men and women. Plymouth Church, where Henry Ward Beecher, the best known preacher of his century, long occupied the pulpit, is a plain brick building on Orange Street.

At Wallabout Bay is the foremost Navy Yard in this country, started in 1829.

Prospect Park, finely situated on an elevated ridge in the southwest part of the city, has unusual natural beauty and commands wide views of the region around. A half mile beyond is Greenwood Cemetery, one of the most attractive in America. It is at its best about the end of May, when the dogwood is in bloom. Among the notable persons buried

there are Henry Ward Beecher, Peter Cooper, Henry George, Horace Greeley, Elias Howe, inventor of the sewing machine, and Morse, inventor of the telegraph.

The most thronged of New York's seaside resorts is Coney Island, south of Brooklyn, at the entrance to the harbor. It is a strip of sand five miles long, with an average width of scarcely half a mile, separated from the mainland by a little creek. The estimated annual number of visitors is 10,000,000. More than 100,000 are sometimes there in a single day.

The Palisades of the Hudson

VIII

New York State

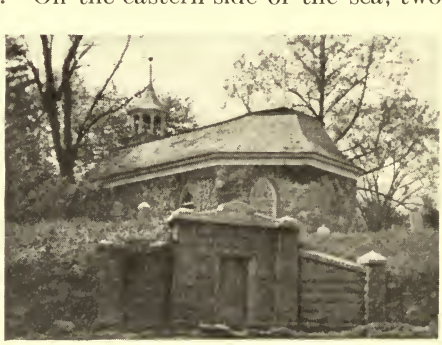
New York, the "Empire State," so called because it ranks first in the Union in population, manufacturing, commerce, and wealth, takes high rank also for its scenic attractions. Within its area, or on its borders, are the Catskills, the Adirondacks, the Hudson, Lake George and Lake Champlain, Niagara, and the Thousand Islands of the St. Lawrence.

As early as 1524 a Florentine navigator entered New York Bay, and he must have gone up the Hudson at least as far as the Palisades, for he speaks of it as "The River of the Steep Hills." The Indians called it "The Great River of the Mountains." The English sea captain to whom the river owes its name first saw it in 1609, when, in command of a little Dutch vessel, the *Half Moon*, he sailed up its broad salt-water channel, fancying that it might afford a short cut to China. In the days of Dutch dominion it was called the

North River to distinguish it from the Delaware, which was the South River of their realm. The Hudson rises in the Adirondacks and flows a distance of three hundred miles nearly due south to the ocean.

Sunnyside, the Home of Washington Irving

The most satisfactory way to see the river is to travel on a Hudson Day Line steamer, leaving New York in the morning and arriving at Albany in the early evening. You do not go far before you have the giant precipices of the Palisades on the left shore. Presently the river expands into the Tappan Sea, a famous cruising place for ghosts and goblins. On the eastern side of the sea, two miles south of Tarrytown, is "Sunnyside," the home of Washington Irving in his later years. At Tarrytown was captured the youthful British spy, Major André, while he was serving as an emissary of Benedict Arnold, who was arranging to betray West Point into the hands of the enemy. Here is Sleepy Hollow, which Irving made famous, and you



The Old Dutch Church at Sleepy Hollow

can identify the spot where Ichabod Crane came to grief when pursued by the headless horseman. On a near-by knoll is a little Dutch church erected about 1690, one of the quaintest and best preserved historic buildings on this continent. Its walls are two feet thick. Not till after the Revolution was English substituted for Dutch in the services. Irving is buried in the churchyard. Among other graves of interest is that of Captain John Buckout, who at the time he died "could count two hundred and forty children and grandchildren" —a fact graven large on his tombstone.

Popelopen Bridge

The Hudson attains its greatest width, four miles, at Haverstraw Bay. On the west shore here is an almost continuous row of the rough, widespreading sheds used by brickmakers. At the north end of the Bay, Stony Point thrusts its rugged headland out from the western side, and narrows the stream to a half mile. It was captured by the British June 1, 1779, and recaptured six weeks later in a fierce midnight assault by "Mad" Anthony Wayne, who, when Washington had asked him if he was willing to undertake the enterprise, replied, "I'll storm hell, sir, if you'll make the plans."

Just beyond Peekskill you arrive at the southern gate of the Highlands, and, for twenty miles beyond, the river plays hide and seek with the ancient rock-ribbed hills and mountains. Some of the notable heights are the Dunderberg, Bear Hill,

Anthonys Nose, Sugar Loaf, and the final grand group at the northern gate, Crow Nest, Taurus, Breakneck, and Storm King. Midway are the shaggy cliffs of West Point, the "Gibraltar of the Hudson," and here is the great Military Academy established in 1802. An important historic place farther north is Newburg where Washington had his headquarters for more than a year in a house that still stands. The General's hall of reception and dining room was a large apartment in the center of the house, remarkable for its having seven doors and a single window. The only bridge which spans the river between Albany and the sea is at Poughkeepsie, $1\frac{1}{4}$ miles long, and 200 feet above the stream. By the Poughkeepsie waterside is the old brewery whence came the money to found Vassar College for women on the outskirts of the city in 1861.

A half dozen miles north, on the other side of the river, is West Park, long the home of the nature writer, John Bur-

A Northern Glimpse of the Hudson from West Point

roughs. He was born in 1837 at Roxbury in the Catskills, whose "Mountains of the Sky," as the Indians called them, soon come into view. The same town was the birthplace of Jay Gould, and he and Burroughs attended the local district school together. The Catskills cover an area of about 500 square miles. They are the land of Rip Van Winkle and have great charm of scenery, climate, and accessibility, which draws to them a host of summer sojourners. This region is now a chief source of water supply for New York City. The Ashokan Reservoir is twelve miles long and covers the site of seven villages. Near Storm King the water is conducted through a tunnel under the river at a depth of 1100 feet. The enterprise is one of the world's greatest engineering projects. It cost nearly $200,000,000.

The Vassar College Gate

As the voyage up the Hudson draws to a close, 145 miles from New York, you see Albany's massive State Capitol looming against the sky. It was begun in 1869 at an estimated cost of $4,000,000. The actual cost since the corner stone was laid has been nearly $25,000,000. Albany became the capital of the state in 1797, after a score of years of uncertainty, during which Kingston, Poughkeepsie, and New York City each served for a time as the seat of government. The average rise of the tide here is somewhat over two feet. One

of the famous men born in the city was Gen. Philip Sheridan. On Clinton Street is the handsome spacious Schuyler mansion, where have been entertained such guests as Washington, Lafayette, Franklin, and Aaron Burr. Here Alexander Hamilton and Elizabeth Schuyler were married in 1780. The next year some Tories and Indians forced their way into the house intent on capturing Gen. Schuyler, and an Indian threw his tomahawk at one of the older daughters, who was hastening upstairs carrying her infant sister. The tomahawk struck the handrail, making a cut that is still there.

Mongaup Falls in the Catskills

The country above Albany is threaded with canals, and opposite Troy is the chief outlet of the Erie Canal into the Hudson. A few miles farther north the river receives the waters of its chief tributary, the Mohawk. On the borders of Cohoes the latter stream comes tumbling over a high ragged ledge in a quite impressive waterfall. A few miles west Mother Ann Lee, "The Lady Elect," founder of the Shakers, established the first Communistic settlement in the United States in 1776. She declared that when she left our world she would ascend to heaven in the twinkling of an eye. This program, however, was not carried out. She died a natural death at Watervliet, and is there buried.

SUMMER IN THE CATSKILLS

The most noted place in the region to the north is Saratoga, the peculiar virtues of whose springs were well known among the Indians long before the white men came to America. The first hotel was built there in 1771, when the surroundings included sixteen Indian cabins in plain sight. Wolves howled and panthers screamed by night, and the vicinity was frequented by black bears, deer, and moose. Yet Saratoga Springs presently became one of the greatest of the world's watering places, with all the charm that wealth and fashion could confer. One of the popular excursions in the region is ten miles to the cottage at the summit of Mt. McGregor in which Gen. Grant died in 1885. The Battle of Saratoga, in the autumn of 1777, which led to the surrender of Burgoyne, was fought twelve miles to the east near the Hudson.

Farther up the river is Glens Falls, of interest to the stranger because a rocky islet, in the middle

WINTER IN THE CATSKILLS

of the river, right where the stream begins its chaotic tumble of seventy-two feet down the ledges, was the scene of some of the most thrilling incidents in J. Fenimore Cooper's "The Last of the Mohicans."

We are now near Lake George, thirty-three miles long, and for the most part two or three broad. It has two hundred and twenty islands, and many a wooded guardian height rises from its borders. At the southern end the old embankments of Fort William Henry can still be traced, and other colonial forts in the region survive in similar half-effaced hillocks. There was fighting around Lake George for years, in which French, English, and Indians all took part, and many were the wild and savage deeds done. The water is surprisingly translucent, and you can watch the gambols of

Albany from the East Side of the Hudson

the finny folk many fathoms below the surface. At the Narrows is Shelving Rock, with its palisades and dens of rattlesnakes. Here the water reaches a depth of four hundred feet. One of the islands is an odd little nautical eccentricity

that mimics a ship in its verdure, and so is called Ship Island. The discoverer of the lake was a French Jesuit, Father Jogues, who passed through it while going on a mission from Canada to the Mohawks in 1646. He was kindly received

Falls of the Mohawk at Cohoes

by the tribe at first, but afterward was accused of being a sorcerer and inflicting on the Indians a scourge of caterpillars. One evening, as he was stooping to enter a lodge, an Indian following behind, armed with a hatchet, struck him lifeless. His head was fixed on a palisade, and his body was thrown into the Mohawk River. At Auriesville a chapel has been erected on the site of his martyrdom.

In the four miles that the water of Lake George travels to Lake Champlain it descends two hundred and thirty feet and forms two series of cascades. The latter lake bears the name of its first explorer, who came from Quebec by water in 1609 and entered the lake from the north with two white companions and sixty Indian warriors in twenty-four canoes.

Lake George, South from Sabbath Day Point

More than a hundred years passed, and then the French began to intrench themselves at Scalp Point, which the English called Crown Point. Later they fortified Ticonderoga, a name derived from the Iroquois, meaning the "Meeting of the Waters." But the French called it Carillon, which is equivalent to "Chimes of Bells," and refers to the music of near-by rapids. The Indian name for Lake Champlain was equivalent to the "Gate of the Country." The lake was a famous fighting region of the Indians, and the French and English fought to control it, and later the English and Americans battled there. The best known episode in this warfare is the capture of Ticonderoga by New England volunteers under Ethan Allen. They crossed from the east side of the lake in rowboats in the night of May 9, 1775. A surprise was essential, and only eighty-three men were over soon enough to follow Allen and the next in command, Benedict Arnold, up the ridge to the fortress at daybreak. They met little resistance, and when the startled commandant appeared in his night garments, Allen demanded the surrender of the stronghold, "in the name of the great Jehovah and the Continental Congress." The fort with all its vast supplies fell into American hands at a very opportune time when the struggle for liberty had just begun. Probably the most widely famous natural attraction of the lake borders

is the Ausable Chasm. Sable is a French word that means sand, and the name is descriptive of the sandy bed of the Ausable River near its mouth. The chasm, one hundred to one hundred and seventy-five feet deep and only twenty to forty wide, is one of the most impressive specimens of nature's carving east of the Rocky Mountains. A path threads its depths for a mile, and you can continue the journey somewhat farther by boat. Near the big gorge is a little one called Poke o' Moonshine. North of Westport, a short distance, is Split Rock, thirty feet high and a half acre in extent. It is separated from the mountain at its rear by a deep cleft about fifteen feet wide. According to the Indians, a chief who was drowned there dwelt afterward in the water under the rock. He had power over the winds and waves, and as the Indians passed in their canoes they were accustomed to throw in gifts to propitiate him.

West of Lake Champlain are the Adirondacks, extending in that direction eighty miles, and from the Mohawk River northerly one hundred and twenty miles nearly to Canada. Most of the region is densely covered with forest. Lumbering is carried on extensively, and much timber is annually sent down to the Hudson and St. Lawrence. There are more than one thousand lakes in the Adirondacks, varying in size from a few acres to twenty square miles. Among the wild creatures in the district are panthers, bears, wild cats, deer, beaver, otters, badgers, eagles, loons, and herons. The waters are well stocked with trout and bass.

Ticonderoga on Lake Champlain

Photo by Warwick S. Carpenter

Lower Ausable River near the Outlet

Adirondacks means tree-eaters, a name jokingly applied by the Mohawks to an invading tribe from Canada, which, after using up its stores of fish and venison, found a precarious substitute in the buds and bark of certain trees. A thin tide of home-makers began to creep into the region after the Revolution. The skin-hunters prospered, prospectors searched for gold, and lumberers stripped the more accessible valleys and slopes of white pine and hemlock. The land was a game-filled paradise until it began to be a pleasure resort about 1870. The last wolf was an old yellow-fanged one killed near Brandreth

© Detroit Photo Co.

Grand Flume, Ausable Chasm

in 1892, but only a few decades earlier the wolves stole venison from camps, and destroyed great numbers of deer when the deep winter snows made flight difficult. Long before the last wolf perished, the beaver, which had been abundant, were extinct; but beaver that were released in 1905 and protected have multiplied until now they are so numerous as to be a pest in some sections through their propensity for flooding the country with their dams.

Ampersand Pond and Mt. Seward

In the year that Napoleon suffered disaster at Waterloo, his brother, Joseph Bonaparte, King of Spain, bought 118,000 acres in the Adirondacks around Diana, a name which he bestowed. He built a hunting lodge on the shore of the lake that now bears his name, put up a summer house at Alpena, and another with bullet-proof rooms at Natural Bridge on the Indian River, where it can still be seen.

In 1857 John Brown bought a piece of improved land at North Elba. There he made a home for himself and his family, and there his "body lies a-moldering in the grave." Two other spots with famous associations are Follensby Pond and Ampersand Pond, beside each of which a group of Cambridge friends, Emerson, Lowell, Agassiz, and Still-

An Adirondack Trail

man, spent a summer. They bought 22,500 acres for $600 and intended to philosophize there for their remaining summers, but the Civil War cut the scheme short.

A beloved modern dweller in the Adirondacks was Dr. Trudeau. At the age of twenty-four he discovered that he had tuberculosis and left New York City to dwell in the woods. There he successfully combated the disease for forty years and established the great sanitarium at Saranac Lake, which has been the model for innumerable others. His most famous patient was Robert Louis Stevenson, who was in his care during the winter of 1887–8.

One of the pests that plague the summer campers in the woods is flies. The season for them opens in mid-May with the punkies, which, though only of pin-point size, are capable of being superlatively irritable. The black fly appears in early June. Soon afterward mosquitoes begin to be troublesome, and they are no observers of hours, but are ready for business day and night. All these pests can to some degree be circumvented by the use of mosquito netting, smudges, and lotions. Few of them survive beyond the end of summer.

Buttermilk Falls near Long Lake

The Adirondacks have many good motor roads, and the labyrinthine lakes and streams furnish two canoe routes, each more than one hundred miles long. Ten of the mountains are over 4000 feet high and the noblest of them all, Mt. Marcy, attains an altitude of 5344 feet. Well up toward this mountain's summit is Lake Tear of the Clouds, which is the source of the Hudson. The lake is eighty yards long by about thirty wide. It is very shallow, with a bottom of soft black mud that makes its clear water look like ink. The Indian name for Mt. Marcy was Jahawnus, that is, the Cloud-Piercer.

An old place south of the Adirondacks of exceptional historic interest is Schenectady, which suffered severely at the hands of the French and Indians raiding from Canada in 1690. It was then a palisaded Dutch village on the remotest frontier of the colony. The attack was made toward midnight of February 8 in a cold gusty snowstorm. Sixty persons were killed, twenty-seven carried away captives, and all but half a

Racquette Lake

dozen of the houses burned. The surviving inhabitants, who numbered about two hundred and fifty, buried their dead, including their pastor, made what provision they could against the severity of the winter, and began the work of reconstruction. About fifty miles farther west is the summer resort of Cherry Valley which suffered in a similar way in 1778. All its people were either massacred or taken prisoners.

One of the most picturesque of colonial characters was Sir William Johnson. At Johnstown, about 50 miles northwest of Albany, he built "Johnson's Hall," as he called it, and there lived in baronial style, exercising great hospitality. He was intimate with the Indians, spoke their language, and at times put on their dress and their paint, and whooped, yelped, and stamped like one of them. The Mohawks adopted him into their tribe and made him a chief, and he married a squaw. His mansion still stands.

A Stage between North Creek and Indian Lake

At the southern end of Otsego Lake is Cooperstown, founded in 1786 by the father of J. Fenimore Cooper, the novelist. The latter was brought there when an infant, and it continued to be his home until he died in 1851. His father's log house was soon replaced by Otsego Hall, which for many years was the most spacious and stately residence in central New York. A statue of an Indian hunter marks its site. Cooper's Indians have been defined by Mark Twain as "an extinct tribe that never existed," but his books

Lake Tear of the Clouds, Mt. Marcy

remain one of the most vitally interesting literary products of his time.

Syracuse produces 3,000,000 bushels of salt annually, yet this is now a comparatively unimportant item in the city's industry. Its salt springs, in the marshes bordering Onondaga Lake, have been exploited since 1650.

Ithaca, at the head of Cayuga Lake, is the seat of the famous coeducational Cornell University. The vicinity contains many pretty waterfalls, the finest of which is Taughannock Fall, which makes a perpendicular plunge of two hundred and fifteen feet in a rocky-sided ravine. This is the highest waterfall east of the Rockies.

The next important lake in the series that is found in this part of the state is Seneca. It is thirty-eight miles long but less than three broad. The water is seven hundred feet deep and never freezes.

An Adirondack Beaver Dam

Rochester is a natural starting point for touring

Log Lean-to in the Adirondacks

in the beautiful Genessee Valley. In the heart of the city the river makes a perpendicular fall of nearly one hundred feet, and a little way downstream Middle Fall descends twenty-five feet, and Lower Fall ninety-six feet. Main Street crosses the river by a concealed bridge, lined on both sides with buildings in the style of Old London Bridge. Near this the Erie Canal is conducted over the river by an aqueduct eight hundred and fifty feet long. About a score of miles to the east, on a hill in the little town of Manchester, Joseph Smith found the strangely engraved metal plates whose inscriptions, when he had miraculously translated them, became the Mormon Bible. He organized the Church of Jesus Christ of Latter Day Saints with six members in 1830. South of Rochester is pastoral farming country; but keep on for fifty miles and you are amid rude hills, where the three Portage Falls make descents varying from seventy to one hundred and fifty feet. They are impressive both in height and volume of water, and below the final one is a tremendous canyon.

Otsego Lake, near Cooperstown

At the extreme

west end of the state is Chautauqua Lake, only eight miles from Lake Erie, yet whose waters go to the Gulf of Mexico. Here is the summer meeting-place of the Chautauqua Institution, a system of popular education, including public lectures and home reading circles, which has spread all over the United States since it was founded in 1878.

Taughannock Fall, near Ithaca

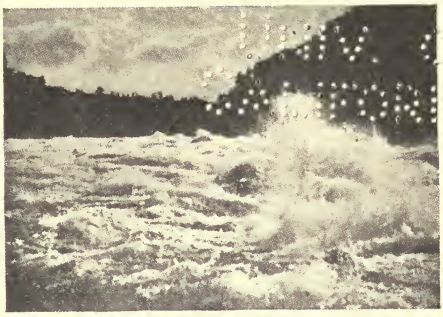
Buffalo, the second largest city in the state, is known as the "Queen City of the Lakes." Its situation at the east end of Lake Erie makes it an emporium for much of the traffic with the Northwest. The first white man's dwelling was erected there in 1791. A decade later the place was laid out on a grand scale with broad radiating avenues on which were bestowed such names as Van Staphorst, now a part of Main Street, Stadingsky, now Church Street, and Schimmelpennick, now Niagara Street. Its own name was derived from the fact that bison used to visit the neighboring salt licks. In Forest Park Cemetery is a monument to the famous Indian warrior, Red Jacket, who died in 1830 at the age of about

© Detroit Photo Co.

Falls of Genesee near Rochester

eighty in his log cabin four miles from Buffalo. The city's harbor is protected by a breakwater that is several miles long, and at the waterside are the mighty forms of more than two score grain elevators with a capacity of many millions of bushels. Electric power is delivered in the city from Niagara Falls in practically unlimited quantities. At Buffalo was launched in 1818 the first steamboat to make an appearance on the lakes. She was a side-wheeler called the *Walk-in-the-water*, had unboxed wheels, and six lengths of stovepipe put together served for a smokestack. For several years she plied back and forth between Buffalo and Detroit. The trip often took thirteen days, and the fare was eighteen dollars.

The Entrance to the Cave of the Winds



Whirlpool Rapids

The rapid growth of Buffalo dates back to 1825, when the Erie Canal was completed. That was before the time of the telegraph, and cannon were placed at intervals within hearing of each other all along the route to carry the news when the water of Lake Erie was let into the channel that had been dug. At ten o'clock, October 26th, the first cannon boomed at the west end, and at twenty-one minutes past eleven the last of the series of discharges conveyed the tidings to New York. In recent years the canal has been improved at vast expense, and it is now seventy-five feet wide at the bottom, has locks three hundred feet long, and allows the passage of barges with a capacity of one thousand tons.

Lake Erie is connected with Lake Ontario by the Niagara River, which descends three hundred and thirty-three feet in its thirty-six miles. About midway are the great falls. On the brink of the falls the channel is divided by Goat Island, eight acres in extent, to the right of which is the American Fall, 1000 feet wide and 167 feet high, and to the left the Canadian or Horseshoe Fall, 158 feet high with a contour of 2550 feet. Fully seven

Old Quaker Church, Flushing, Long Island

tenths of the water passes over the latter fall. The gorge below is at first comparatively wide, but a few miles farther down, at the Whirlpool Rapids, the huge volume of water is compressed into a space of less than three hundred feet from shore to shore. The falls are receding at the average rate of four feet a year. The first white man to see the falls was the French mariner, Cartier, in 1535. Father Hennepin, who journeyed thither in 1678, said they were "a great and prodigious cadence of water, to which the universe does not offer a parallel." Above the falls are seven miles of rapids that attain an amazing velocity as they approach the brink. A little steamer, the *Maid of the Mist,* makes frequent trips to give visitors a chance to view the falls from close below. Perhaps the most exciting experience possible to the tourist is a visit to the Cave of the Winds. The cave is behind the fall of the narrow stream that separates Goat and Luna islands, and the choking, blinding, deafening tumult of wind and water defy description. A limited amount of power is allowed to be developed by withdrawing water above the falls, and this power is used in lighting towns, and in operating electric railways and manufactories, even as far as Syracuse, one hundred and sixty miles distant. The Indians have a tradition that the falls demand two human victims each year. This average is more than maintained, partly by accidents, partly by suicides. About eight miles to the northeast of the falls is the reservation of the Tuscarora Indians, who make baskets and other articles to sell. At the mouth of the river is old Fort Niagara, established in 1678. It developed into a little city in itself, covering a space of about eight acres, and no place west of Albany and south of Montreal equaled it for a long period.

At the east end of Lake Ontario the Lake of the Thousand Islands, as it is called, extends for forty miles down the St. Lawrence with a width of from four to seven miles. The

actual number of islands big and little is about seventeen hundred. Many of them are favorite summer resorts, while others are private property occupied by fine country houses. These islands are one of the most famous attractions of the Great Lake region.

An interesting portion of the state that has already received some attention in the preceding chapter is Long Island. It has a length of over a hundred miles and its greatest width is twenty miles. Much of it is rather featureless farm country, but there are many quaint old homes and simple rustic churches and a good deal that is attractive along the shore. At Flushing, about a dozen miles northeast of Brooklyn, is a Quaker meetinghouse completed in 1719. The British used it for a prison barracks and hospital in the Revolution, and they burned the fence around the graveyard for fuel. The "Good Gray Poet," Whitman, was born a score of miles farther east, in Huntington, in 1819. He was named Walter after his father, but was commonly called Walt in boyhood and chose to retain that form of his name in later life. Toward the far end of the island, at Easthampton, is the fine colonial dwelling which inspired "Home, Sweet Home." It is the birthplace of John Howard Payne. In some of the old towns are white-sailed windmills that grind corn.

A Windmill, Easthampton, Long Island

The name of the state was given in honor of the Duke of York, to whom his brother, Charles II, granted the region in 1664. The people are called "Knickerbockers." Knicker means a box, and bock a he-goat, and the entire name seems to have been coined by Washington Irving to serve for that of one of his fictitious characters.

Delaware Water Gap

IX

New Jersey

In 1651 the Swedes who had settled Delaware crossed the river a few miles south of Wilmington and built Fort Elfsborg at the mouth of Salem Creek. But they soon deserted their stronghold in disgust after giving it a name which was equivalent to Fort Mosquito. Thus early did New Jersey mosquitoes earn the reputation that clings to them to this day, and it is perhaps only natural that New Jersey should sometimes be dubbed "The Mosquito State." It is, however, more generally called the "Jersey Blue State," which refers to New Jersey's overstrict and religious early "blue laws." The people are nicknamed "Clam-catchers" from the principal occupation of many of its poorer dwellers on the coast.

The Dutch were the first permanent settlers. Some of their traders occupied Bergen Point, now a part of Jersey City, about 1615, and in 1623 a party of Dutch built Fort

Nassau, on the east bank of the Delaware four miles below Philadelphia. But not until the region came into the hands of the English in 1664 did colonization begin with any vigor.

New Jersey borders on the Hudson for a considerable distance, and so has on its territory most of the gigantic bluff of trap rock known as the Palisades which extends along the west side of the river from Fort Lee, opposite New York City's 170th Street, northward for fifteen miles. The rocks rise very abruptly from the water's edge to a height of from two hundred and fifty to six hundred feet. The entire length of the Palisades is now an interstate park controlled to make spoliation by quarrying or monopolization of any portion of it for private purposes impossible. It is a favorite camping and pleasure resort, and all its privileges are to be had at cost. A splendid highway has been begun that will eventually extend the whole distance from Fort Lee to Albany with the river practically always in sight. Near the waterside, under the cliffs at Weehawken, was formerly a narrow grassy plateau that was a favorite resort for duelists. Here Alexander Hamilton was fatally wounded by Aaron Burr in July, 1804. A monument on the bluff above commemorates the tragedy. Farther down the river is Castle Point, where, one night in 1643, a party of Dutch and friendly Mohawks from Manhattan killed one hundred Indians, men, women, and children, by either shooting them or driving them into the Hudson. An Indian village in this vicinity was called Hobock, a name which the whites have retained in the form of Hoboken.

West of Jersey City are the extensive salt marshes of the Hackensack, covered with reeds and sedge grass that grow in soft mud which is sometimes forty feet deep. But you soon arrive at the prosperous manufacturing city of Newark, the largest place in the state. Not far to the south is Eliza-

Canoe Beach at Foot of Palisades

beth, which was New Jersey's first seat of government and was not superseded by Trenton until 1790.

A famous scenic attraction in the northwestern part of the state is the Water Gap, where the Delaware flows through the Kittatinny Mountains. Only by taking a trip through the Gap in a boat can you get an adequate impression of its two-mile length and of the height of its rocky walls rising 1500 feet almost from the water's edge. In the vicinity are numerous vernal roadways, sylvan paths, waterfalls, and outlooks from cliff and hill and mountain top that entice the visitor to a prolonged stay. Ten miles farther up the river is the "Fiddler's Elbow," where the channel takes the form of a letter S. In the neighboring wild and rugged section is High Point, the loftiest elevation in the state, with an altitude of 1809 feet.

Down the river eighty-three miles is Trenton, at the head of navigation. Great quantities of peaches and cranberries are raised in the tributary region. Gen. McClellan is buried in Riverview Cemetery here. Wash-

Morris Canal Towing Bridge across Rockaway River

ington crossed the Delaware, eight miles to the north, on Christmas night, 1776, in a storm of sleet and snow, to attack one thousand Hessians quartered in Trenton. He captured them all, defeated the British at Princeton, and retired to Morristown.

Seven miles below Trenton is Bordentown, where Joseph Bonaparte, elder brother of Napoleon, and at one time King of Naples and King of Spain, bought an estate of 1400 acres after Waterloo. This was his home until 1832. It is now a public park. At Burlington, thirteen miles farther south, is the house in which J. Fenimore Cooper was born in 1789. The industrial and commercial city of Camden, just across the Delaware from Philadelphia, was long the residence of Walt Whitman, and there he is buried.

© Detroit Photo Co.

BLAIR HALL, PRINCETON

Historic Princeton, about twenty miles northeast of Trenton, is famous, first of all, for its college. One of the early college presidents was Jonathan Edwards. He is buried in the Princeton Cemetery, as is also his brilliant but erratic grandson, Aaron Burr. A recent head of the college was Woodrow Wilson. The oldest college building is Nassau Hall, completed about 1756. It served as a meeting-place for Congress in 1783. In the Princeton vicinity, on a height above the town of Rocky Hill, is a mansion where Washington was several times a guest, and from which he issued his farewell address to the army.

The most popular resort section of New Jersey is its seashore. This is practically a suburb of New York and Philadelphia for its entire length. The most conspicuous feature of its northern coast is Sandy Hook, which forms one of the portals of New York Bay, and on which are an old stone fort and three lighthouses. Near Highlands, at the southernmost nook of New York Harbor, is Water Witch Park, which takes its name from Cooper's "Water Witch," a novel that has its scene laid in the vicinity.

A seaside resort with an individuality of its own is Ocean Grove, controlled by a Methodist association. The grounds have the sea on the east, lakes north and south, and a high fence on the west. At ten in the evening, daily, the gates are closed. They are not opened at all on Sunday. No Sabbath bathing, riding, or driving is permitted, no theatrical performances are allowed at any time, and the sale of tobacco is strictly prohibited. An annual camp meeting is the great event of the season.

Long Branch, on a bluff facing the sea, above a beautiful sandy beach, has about 12,000 permanent inhabitants, and

Summer on the Beach at Cape May

a summer population five times that number. At Elberon, the fashionable cottage part of the resort, can be seen the dwelling in which President Garfield died.

Atlantic City, the most frequented of all American seaside resorts, is on a sand strip separated from the coast by five miles

of sea and salt meadows. It attracts visitors through the entire year, for the climate is comparatively mild and sunny even in winter. More than 50,000 persons have bathed there in a single summer day. The splendid beach is bordered by the famous "Board Walk," forty feet wide and over five miles long, and flanked on its landward side by hotels, shops, and places of amusement. The Walk is brilliantly illuminated at night by myriads of electric lights, and is thronged by gay crowds seeking diversion.

Cape May, down at the southern tip of the coast, is a rival of Atlantic City in its natural attractions. A favorite inland resort is Lakewood, sixty-three miles south of New York, in the heart of a pine forest. On account of its sheltered situation and mild climate it attracts many winter guests.

New Jersey was named by one of its early colonial proprietors who had been governor of the English Isle of Jersey.

Stone-Arch Bridge over the Susquehanna at Rockville

X

Pennsylvania

Pennsylvania, the "Keystone State," so called because of its position and importance among the original thirteen, was first settled by Swedes, who built a fort where Wilmington now is, and bought land of the Indians on the west side of the Delaware as far north as a point opposite Trenton. They founded a town on the site of Philadelphia, built churches here and there, and when William Penn's Quakers arrived in 1681, there were several hundred Swedes in farm houses and hamlets along the Delaware. For a time the newcomers dwelt in caves that they dug in the river bank, and in one of these caves, which was afterward used as a tavern and called the "Pennypot," was born John Key, the first child born of English parents in Pennsylvania. Penn presented the child with a lot of ground. The boy lived to be eighty-five years old, and was known as the "First Born" to the day of his death.

The name of the settlement — Philadelphia, that is, the City of Brotherly Love — was chosen by Penn. A few months after he arrived he made his famous treaty with the Indians under a great elm on the banks of the Delaware a mile north of the present Market Street Ferry. There you will find Penn Treaty Park and a beautiful monument.

The elm blew down in 1810. Penn built a small square house of imported bricks on the crest of a low hill that rose from the boat haven. That was his home until he returned to England in 1684, when he placed it at the service of the Provincial Council, and for several years it was the State House of the province. When he came again to Philadelphia, in 1699, he built a new house for himself and eventually gave the other dwelling to his daughter, Letitia. The Letitia House, as it became known, is now in Fairmount Park.

One early morning in 1723 Benjamin Franklin, then a youth of seventeen, walked up Market Street. He presently became the city's most notable resident, with a home on High Street, where hospitality and good cheer always reigned. In his home garden he flew his immortal kite, and to the house wall he attached the lightning rod that he devised. When he died, in 1790, 20,000 people followed his body to its grave in the old Quaker burying-ground in the yard of Christ Church.

An attractive contemporary of Franklin's was the Quaker botanist, John Bartram, born near Derby, Pennsylvania, in 1699. Philadelphia was his home for most of his life, and there he built, in 1731, the simple and beautiful stone house which still stands in what is now Bartram's Park.

The oldest church in the city is "Gloria Dei," which, when the Swedes built it in 1700, was considered "a great edifice, the finest in the town." Christ Church, a portion of which dates back to 1731, was completed with the aid of lottery tickets. Washington, Franklin, and other noted men have worshiped in it. The Friends' Meeting-house in Arch Street is a quaint and venerable structure.

At the end of an alley leading south from Chestnut Street is Carpenter's Hall, a two-story brick building erected by the guild of carpenters and house masons. In the hall, which takes up the entire lower floor, the first Continental Congress met in September, 1774.

Not far away, bordering on Chestnut Street, is Independence Hall, an admirable example of colonial architecture, graceful in its proportions, and with a simple and fitting dignity. When completed, in 1734, it was surrounded by magnificent trees, veterans of the primeval forest, but these last survivors in Philadelphia of the mighty woods which gained for the state its sylvan name were gradually sacrificed until, at the time of the Revolution, the building stood bare and desolate. After the war its grounds were enlarged, new trees were planted, and this Square became a fashionable loitering place of whose genteel and urban charms the local poets wrote stilted verses for the columns of the city press. In 1752 the Liberty Bell was hung in Independence Hall, and on July 8, 1776, it fulfilled the proud mission inscribed on it — "Proclaim liberty throughout the land, to all the inhabitants thereof." When the occupation of the city by the British seemed immanent, the next year, this bell and that of Christ Church were taken down and sunk in the river near Trenton to prevent their falling into the hands of the enemy; and there they remained until the war ended. The Liberty Bell was cracked in 1835 while tolling for the funeral of Chief Justice Marshall.

The Letitia House in Fairmount Park

The Continental Congress met in the Hall when it adopted the Declaration of Independence, and here Washington was appointed commander in chief of the army. The building has been restored as nearly as possible to its original con-

INDEPENDENCE HALL, PHILADELPHIA

dition, and contains a national museum of colonial and Revolutionary relics, including the Liberty Bell, and the famous Rattlesnake Flags with the motto "Don't tread on me," that were the earliest national banners.

On Arch Street is the Betsy Ross house, a typical mechanic's dwelling of its day, in which the first flag of the stars and stripes was made from a design prepared by a committee of Congress and George Washington in 1777.

October 4th of that year a battle was fought in Germantown, then a village of one long street a few miles north of Philadelphia. Washington attacked the British in a dense fog, and victory seemed immanent when one American brigade fired on some of their comrades. A panic followed and a general retreat of the assailants was ordered. This was only about a week after the British had gained possession of Philadelphia, where they remained until the next June. Except for this short period the city was the capital of the state until 1799, and it was the seat of the federal government from 1790 to 1800.

One of the most imposing of modern structures in Philadelphia is the City Hall, which covers four and one half acres, a greater area than is covered by any other building in the United States. It cost $25,000,000. The tower, five hundred and ten feet high, is surmounted by a thirty-seven-foot statue of William Penn.

The city is justly proud of Fairmount Park, which began in 1812 with a modest purchase of five acres, but now con-

tains more than 3000 acres. It is the largest city park in the United States, and the most beautiful in the world. In it was held the Centennial Exhibition, the first World's Fair that this country had ever seen. It gets its name from an isolated conical hill about ninety feet high.

Sentiment in Philadelphia has strongly favored the owning of a home by each family, and as the population increased the streets reached out over the level land with row after row of modest dwellings. Two- and three-story brick houses make up the greater part of the city, and each is generally the property of some successful citizen who is its occupant. Thus the place gets its title of the "City of Homes." The name "Quaker City" is a reminder of the city's origin. The Quakers are still an important element in the population, for many of the oldest, wealthiest, and most esteemed families belong to this sect. The place has always been one of the foremost manufacturing cities of the United States, and is only surpassed by New York and Chicago. Among its important industries is shipbuilding. The Cramp Shipyard, established on the Delaware in 1830, has world-wide fame.

The Betsy Ross House, Philadelphia

About the time that the use of steam as a motive power for railways became recognized as a splendid possibility, Matthias Baldwin, a young Philadelphia silversmith and toolmaker, con-

structed a toy engine capable of dragging two carriages, each holding two people, around a track laid on the floor of a city museum. As a result, he was commissioned to build a locomotive for a railroad running up the Schuylkill Valley twenty miles to Norristown. Thus "Old Ironsides," parent of American locomotives, came into being. It was put on the road in November, 1832, and the following notice was inserted in the *Daily Advertiser:* "The locomotive engine will depart daily, when the weather is fair, with a train of passenger cars. On rainy days horses will be attached." The Baldwin Locomotive Works, which Matthias Baldwin founded, have become the largest establishment of their kind in the world.

January 1, 1839, an all-rail line was opened from Camden to Jersey City by which the railroad company declared it was "possible to go from Philadelphia to New York in six or seven hours with almost as much comfort as the traveler could have at his own fireside, whereas the journey had formerly required eleven to twenty hours, and had been made at the expense of great discomfort and even hazard of life."

On the forenoon of New Year's Day Philadelphia has its Mummers' Parade. You may then see marching up Broad Street gorgeous company following gorgeous company in a distinctly feudal demonstration chiefly participated in by mechanics, laborers, and small shopkeepers. Men freely spend the savings of a year to make a show in these vying and unbelievably berigged companies. For hours

Broad Street, Philadelphia

the paraders march or dance, with music blaring and feet tapping time.

Ten miles west of Philadelphia is Bryn Mawr with its famous college founded by a Quaker for the advanced education of women, and opened for students in 1885. The name is Welsh for "great hill." About fifteen miles farther on is Valley Forge, where Washington with his army of 10,000 men went into camp on December 19, 1777, and remained until the next June. In midwinter more than one third of the men were unfit for duty on account of sickness or lack of food and clothing. The camp ground has been bought by the state. Washington's headquarters, a substantial stone house built in 1757, has been preserved, and several log cabins and bake ovens such as were used by the army have been reproduced. A score of miles to the west, at Pottstown, is a wonderful group of "Ringing Rocks," which give forth a musical sound when struck. Near Reading, which is somewhat farther up the Susquehanna, Daniel Boone was born in 1734, but when he was about seventeen the family moved to North Carolina.

A Hut at Valley Forge

Southeast of Valley Forge is the interesting little church of St. David's at Radnor, forty feet long by twenty-seven broad, built by the Welsh in 1715 to replace one of logs. The Continental Army, while camped in the vicinity, cut

out the lead of the diamond-shaped windows and molded it into bullets. After the Battle of the Brandywine sixteen British soldiers were buried in the churchyard. Here is also buried "Mad Anthony Wayne," who was born in a house still preserved at Waynesborough, a few miles to the west. The region that lies beyond is the "Garden of Pennsylvania," one of the richest and most carefully cultivated farming districts in America.

A famous colonial episode was the Lancaster Indian Massacre in 1763. Near that town dwelt a little band of friendly Indians who had long since been converted to Christianity, and supported themselves by basket weaving. The colonists of Paxton, influenced by the harangues of a militant pastor, made a descent on the Indian village. But knowledge of their intentions had leaked out, and most of the tribe had gotten away. However, three men, two women, and a young boy, who remained, were killed, and the hamlet set on fire. Afterward the "Paxton Boys" rode to Lancaster, where several Indian families, fourteen persons in all, had been lodged in the jail for protection. The raiders beat down the jail door and cut the fourteen Indian men, women, and children to pieces with their hatchets. This savagery never was punished. Lancaster became the capital of the state in 1799, but was supplanted by Harrisburg in 1812.

At the latter place is an inclosure in Harris Park which contains the grave of John Harris, father of the founder of the city, and the stump of a tree to which he was tied in 1718 by drunken Indians who meant to burn him alive. The State House is adorned with paintings by famous artists. Matthew Quay, of odorous memory as a politician of pernicious type, is honored with a statue in a niche in the rotunda which seems to indicate his acceptance as the state's patron saint. Moreover, when the electric lights are burning there are curious reflections on the marble behind him that sur-

round his head with a halo. An attractive region to the west is the valley of "The Blue Juniata," a stream which has been immortalized by a song of that title. Just beyond Altoona, as the railway climbs the Alleghanies, is the renowned Horseshoe Curve, the sides of which are parallel, so that trains traveling the same way may be moving in opposite directions. In this part of the state near the junction of Blair and Bedford counties is Blue Knob, 3136 feet high, the loftiest summit in Pennsylvania.

State House, Harrisburg

South of the capital, only seven miles from the Maryland line, is Gettysburg, where was fought, early in July, 1863, the most important battle of the Civil War. The men on the Union side numbered about 80,000, commanded by Gen. Meade, and the Confederates 73,000 led by Gen. Robert E. Lee. In no other battle of the war were so many engaged. Each side lost in killed, wounded, and missing more than 20,000. The Confederates had decided to carry the war north into the enemy's country, but were decisively defeated. On the southern borders of the town is a national cemetery, at the dedication of which in November, 1863, President Lincoln made the "twenty-line address" which is considered his most immortal utterance. The seventeen acres of this cemetery are the burial-place of 3572 soldiers, among whom are over a thousand unknown dead. Beyond it is the most hotly contested portion of the

battlefield, including Little Round Top, the Valley of Death, the Devil's Den, and the Bloody Angle. Probably Gettysburg is more lavishly marked with monuments than any other battlefield in the world. There are some five hundred of them scattered over its twenty-five square miles.

An important battle in the Revolution was fought near Chadds Ford on Brandywine Creek, not far from the Delaware boundary, in September, 1777. Washington was defeated in this Battle of the Brandywine, and in consequence the Americans lost Philadelphia.

On the southern border of the state, a short distance east of the Susquehanna, Robert Fulton, the inventor, was born at Little Britain in 1765. He went to school only enough to acquire the ability to read and write, and when he was old enough he was apprenticed to a Philadelphia jeweler.

Bethlehem, on the Lehigh River, has a certain romantic interest because it was founded by the Moravians, which are said to constitute the oldest existing Protestant church. They established a mission there in 1740, and the big simple house of worship that they built a few years later still stands, serene and beautiful.

The Blue Juniata at Huntingdon

Somewhat farther north is an expansion of the Susquehanna Valley, about twenty miles long and three to five miles wide, known as the Valley of Wyo-

ming. The name is of Indian derivation and means "large plains." Its settlement began a few years before the Revolution, and by 1778 there were several villages with schoolhouses and churches. In July of that year the Valley was invaded from the north by a wild aggregation of 1200 soldiers, Indians, and renegade whites led by "Indian Butler," an able but savagely cruel Tory colonel, and by "Queen Esther," a half-breed Seneca who had been liberally educated, and who had been petted and fêted by the best society in Philadelphia, Albany, and New York. A force of three hundred frontiersmen, many of them boys or old men, put themselves in the path of the invaders four miles above Kingston on the west side of the river. They were soon defeated, and many were killed or captured. Queen Esther had a score of prisoners assembled, bound and kneeling about a great bowlder three miles farther north. Then she seized a heavy tomahawk, and shrieked a wild song while she swept swiftly around the circle slaying her victims. Sixteen she killed, and four who attempted flight were slain by her warriors. The great bowlder has been known as the "Bloody Rock" ever since. The next day the Indians passed up and down the entire valley, pillaging, burning, and slaughtering. Those of the people who evaded the foe fled eastward through the wilderness,

Bloody Angle at Gettysburg

chiefly to Fort Penn, sixty miles distant, where Stroudsburg now stands. In one party on the old "Warriors' Path" were nearly one hundred women and children with only a solitary man to aid them. The fugitives had no food except whortleberries which they picked in the woodland. Many perished, and the vast marshy plateau they crossed, which even yet is unreclaimed, is still called the "Shades of Death Swamp."

Ice Flood on the Susquehanna

This part of the state is now one of the most notable coal mining districts in the world, and half the coal used in the United States is mined in Pennsylvania. It was one of Pennsylvania's blacksmiths who first succeeded in using anthracite. In 1792, when a Philadelphia printer brought to the city several wagon loads of the coal and offered to give it away in order to introduce it, he was nearly mobbed for trying to impose on the people with a lot of "black stones." After coal began to be used in the city the agents kept a "specimen fire" burning all day long at 172 Arch Street that purchasers might see for themselves what an admirable fuel they were buying. The original fireplace in which anthracite was first burned, in 1808, is preserved in an old house on Washington Street in Wilkes-Barre. The route north from there to Scranton, by way of Pittston, is through the heart of the anthracite region and abounds in collieries and the villages of foreign laborers. The larger mines with their series of galleries on different levels have miles and

miles of shafts and tunnels. Before the coal is sent to market it has to be sorted so that lumps of the same size are together. This is done in great buildings called coal breakers which stand close to the mouth of the shafts. The coal is hoisted to the top of the breaker, where the larger lumps are broken up. Then it passes down an incline over sieves that separate the sizes. Breaker boys are employed to watch the coal as it slides along and throw out the pieces of rock that are mixed with it.

A superlatively important American industrial center is Pittsburg. It occupies the tongue of land between the Monongahela and Alleghany rivers, which there unite to form the Ohio. George Washington established the location of the city in November, 1753, when, at the age of twenty-one, acting as a government agent, he came thither and decided it was the best place in that part of the country for a fort. After he returned to Virginia a force of soldiers and workmen was promptly dispatched to the wilderness and the fort was begun. But in April there came down the Alleghany from Canada one thousand French and Indians with eighteen cannon in a flotilla of sixty bateaux and three hundred canoes, and the unfinished fort surrendered. The French completed it and named it Duquesne in honor of the governor of Canada. Summer of the next year came, and Gen. Braddock, with British and colonial troops, made his way through the forest from Virginia to a spot about eight miles from the fort on the

Moravian Church, Bethlehem

north bank of the Monongahela, where now is the busy smoke-belching manufacturing city that bears his name. The French and Indians attacked the marching columns there, and about three quarters of the force was killed or disabled. Braddock was fatally wounded, and Washington, who was one of his aides, had two of the horses that he rode killed, and four bullets passed through his clothes. During the disorderly retreat of the vanquished their leader died. His grave is on the National Pike near Ohiopyle in the wild and rugged valley of the Youghiogheny. Three years later, when another English expedition was sent against Fort Duquesne, the French blew up the fortifications and withdrew. A new fort was erected to which was given the name of the British prime minister, Pitt. A blockhouse which was part of a later and larger Fort Pitt survives.

The first railroad across the Alleghanies reached Pittsburg in 1847, and since then the city's development has been rapid. It is an important gateway to the West, but the chief secret of its growth is its position in the center of a region exceedingly rich in bituminous coal, iron, oil, and natural gas. Indeed, much of this tributary district is a veritable "Black Country," full of coal-pits, coke-ovens, and smelting-furnaces. Pittsburg's situation has a good deal of natural beauty, with its rolling plateaus and the rivers closely hemmed in by high hills or precipitous bluffs. But iron furnaces and factories extend for miles along the streams, and the city seldom emerges from its pall of smoke. Its right to be called the "Smoky City" is vindicated not only by

A Coal Breaker

its atmosphere, but by the discovery that the average resident carries in his lungs a quarter of a pint of soot. As viewed from the uplands at night, when the furnace flames leap and glow amid the gloom beside the waterways, it has been likened to hell with the lid off. Pittsburg has more millionaires than any other city on the globe, and the finest residences and grounds in America.

© *Detroit Photo Co.*
BLOCK HOUSE, PITTSBURG

Nineteen miles down the Ohio is the charming old communistic village of Economy, founded by a peculiar religious sect known as Harmonists or Economites. About five hundred of these people moved here from New Harmony, Indiana, in 1824. They taught that the condition of celibacy is most pleasing to God, that the coming of Christ and renovation of the world were near at hand, and that goods should be held in common. As time went on they increased in wealth but decreased in numbers, and at last they sold out, and the society came to an end. Many of their quaint buildings have endured to this day.

Johnstown, seventy-seven miles east of Pittsburg, is well known because of the inundation that overwhelmed it on May 31, 1889. It is an iron-making city at the junction of the deep narrow valleys of the Conemaugh River and Stony Creek. Eighteen miles above Johnstown was Conemaugh Lake, about three miles long and one mile broad. This was a fishing resort of a club of Pittsburg anglers. The waters were restrained by a dam one thousand feet long, and one hundred and ten feet high, ninety feet thick at the base, and

twenty-five feet thick at the top. Violent rains filled the lake to overflowing and about three o'clock that May afternoon a three-hundred-foot gap was broken in the dam. The water swept down the valley in a mass a half mile broad and forty feet high, carrying everything in its way. In seven minutes it had reached Johnstown. A little below the city the mass of houses, trees, machinery, and other wreckage was checked by a railway bridge. It caught fire, and many persons, unable to free themselves from the débris, were burned to death. The estimated total loss of life varies from 2300 to 5000. Property to the value of at least $10,000,000 was destroyed.

Old Church at Economy

Western Pennsylvania is a famous region for petroleum. The name means rock oil, and is suggestive of the source whence the petroleum comes. In the oil region, even in traveling on the train, one sees numerous oil wells, both in operation and deserted. The great center of this oil district is Oil City, and there you can see all the processes of procuring, preparing, and shipping the oil and its products. It is estimated that from the valley of Oil Creek, north of Oil City, oil to the value of $200,000,000 was taken in the ten busy early years. The present yield is insignificant. Titusville has an especial claim on the sight-seer because there

the underground reservoir of oil was first tapped by boring in 1859. Interesting visits may be made down the creek to the hamlets which grew with magic rapidity into populous cities in the boom period, and almost as suddenly vanished. The oil in its natural state is a thick dark yellow or brownish fluid, but when refined becomes clear colorless kerosene oil. From the wells the oil goes to the refineries in pipes, some of which are hundreds of miles long.

Up in the northwest corner, the state has a fifty-mile coast line on Lake Erie, where the most populous city is one with the same name as the lake. The city is a fishing port of importance, which lends its wharves a certain attraction, and on its outskirts, overlooking the lake, is a facsimile of an old French blockhouse that used to stand there. The grape industry flourishes all the way from here to Buffalo, and the country is most lusciously attractive in autumn when the harvest is in progress.

The Spot near Lewes where the First Settlement was Founded

XI

Delaware

The three smallest states in the Union are Rhode Island, Delaware, and Connecticut; and Delaware is about twice the size of the first and half the size of the last. Its length is one hundred miles and its width from ten to thirty-five miles. It is popularly called the "Diamond State," because it combines smallness with importance. For the most part it is low and level, but in the extreme north are hills, valleys, and rapid streams. At Centerville, which is one of the northernmost villages in the state, is the highest point, four hundred and forty feet above the sea. Nature offers so few obstructions in some sections that the railroads are remarkably free from curves. Northward from Dover, beginning near Cheswold, is a fifteen-mile stretch of perfectly straight track, and a score of miles south of Dover is the starting point of another piece of straight track of similar length.

The first settlement was made in 1631 by thirty or forty Dutch colonists on Delaware Bay near Lewes. All might have gone well with them had they not set up a tin plate bearing the arms of Holland. This was destroyed by an Indian who did not know its meaning. The Dutch considered the act an insult to their nation and insisted that the offender should be turned over to them by his fellow-tribesmen. Hostilities ensued, and the colonists were massacred to the last man. Friends who arrived in a vessel the next year found nothing but heaps of ashes and charred bones.

In 1638 Swedes came in two ships from their native land and built a fort on the site of Wilmington. They called the country New Sweden, and they named the settlement Christina after their child queen. More Swedes came and spread over the surrounding country. Then, in 1651, the Dutch set up a fort five miles below Christina at what is now New Castle. Three years later a Swedish war vessel put an end to it. That roused the Dutch of New Amsterdam, and the next year their blustering governor, Peter Stuyvesant, entered Delaware Bay with a fleet bearing over six hundred men. The Swedes were overawed, New Sweden ceased to exist, and, though the Swedes continued to prosper, they gradually lost their identity and language.

Friends' Meetinghouse, Wilmington

Dutch dominion ended with the conquest of New Amsterdam by the English in 1664, and Delaware became a possession of the Duke of York. In order that no other settlements

should encroach on New Castle, the center of government, the northern boundary was determined by drawing an arc of a circle twelve miles in radius, and that curve has remained ever since. In 1680 the Duke leased the territory to William Penn for 10,000 years, and for the next century it was a part of Pennsylvania. A single regiment of Delaware soldiers fought in the Revolution and did valiant service. They carried a number of gamecocks, said to have been the brood of a blue hen. Hence the soldiers themselves were dubbed the "Blue Hen's Chickens," a name that later was applied to the people of the state.

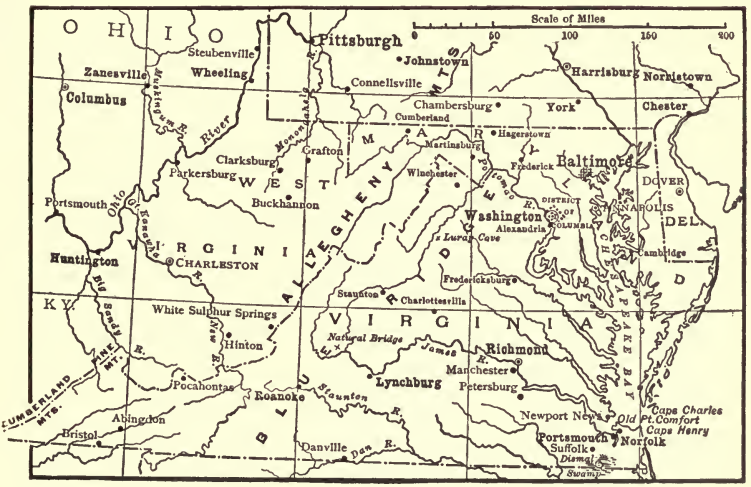
State House at Dover

Delaware's only large city is Wilmington, with extensive manufactures, including the making of iron, steel, carriages, railway cars, ships, gunpowder, and cotton goods. No other place has over 5000 inhabitants. Even Dover, the capital, has much the character of a country town. Just back of the State House, near the jail, is a whipping-post, not now used, but interesting as a relic of the public whippings administered not many years ago. On one of the pleasantly shaded residence streets is a haunted house. It is a fine colonial mansion in which the slaves of the town gathered for festivity on a night when the white folks were having a banquet at the governor's mansion. Slave traders surprised the blacks, who took refuge in the cellar and tried to defend themselves. Forty were killed there, and many of the survivors were carried off. Those who were slain still

haunt the premises. Dover and New Castle and other early places are famous for their charming old houses, which are especially remarkable for their beautiful entrance doorways and wonderfully carved interior woodwork. One such town is Lewes at the mouth of the Delaware. This and some of the neighboring coast towns have a good deal of attraction as vacation resorts.

Down at the southern end of the state, lying half in Maryland, is the Great Cypress Swamp, covering 50,000 acres. In the swamp are buried many logs of well preserved timber which are dug up and worked into shingles and other small lumber products.

Delaware bears the name of an early governor of Virginia who sailed up the river in 1610.



GREAT FALLS OF THE POTOMAC NEAR WASHINGTON

XII

Maryland

The first settlement in Maryland was a trading post established on Kent Island in Chesapeake Bay in 1631. Three years later a colony started the town of St. Mary's on a bluff overlooking the broad river of the same name not far from where this stream joins the Potomac, near the latter's mouth. The settlers were twenty "gentlemen adventurers" and about three hundred laborers who came from England in a little ship, the *Ark*, and her attendant pinnace, the *Dove*. An Indian village on the bluff was bought with iron hatchets and hoes and pieces of cloth. Scarcely a trace of the old settlement now remains.

Lord Baltimore, to whom Charles I granted the region vaguely described as "north of Virginia," was required to pay the king two Indian arrows yearly in token of homage, and a fifth part of whatever gold or silver might be mined. But as no precious metals were produced in the colony this rental amounted to nothing. The king named the colony Maryland in honor of his queen Henrietta Maria.

The northern boundary was long a subject of dispute with Pennsylvania, and finally, in 1767, two English surveyors, Mason and Dixon, were employed to fix the line. They ran it straight east and west, two hundred and thirty miles, where it is now, and thus Maryland acquired its popular name of the "Old Line State."

Maryland's chief city is Baltimore, one of the greatest of American seaports, fourteen miles up the Patapsco River from Chesapeake Bay. It was settled in 1709, but had only two hundred inhabitants in 1752. After that it developed rapidly. Oliver Wendell Holmes has said that three short American poems, each the best of its kind, were all written in Baltimore — Key's "Star Spangled Banner," Poe's "Raven," and Randall's "Maryland, My Maryland." The circumstances of the production of the first of these are especially noteworthy. In September, 1814, the British attempted to capture Baltimore, and Francis Scott Key went to the enemy fleet in a small boat flying a flag of truce to plead for the release of a civilian friend who was held captive on one of the vessels. Lord Cockburn, commander of the fleet, detained Key. He was about to bombard Fort McHenry on Whetstone Point, and boasted that its flag would be hauled down in a few hours. The

Fort McHenry at Baltimore

bombardment began on the morning of the 14th and continued through the following night. When day broke, the flag was still there, and in the gray dawn, Key, who had been an anxious onlooker, wrote on the back of a letter which he laid on a barrel-head the thoughts that had been passing through his mind. Within a week the verses were printed in the Baltimore *Patriot*. Soon afterward they were first sung in a restaurant of the city. The song was caught up in intense enthusiasm, and is now heard wherever the national flag has gone in every portion of the globe.

In April, 1861, great excitement was created in the North by an attack on the 6th Massachusetts Regiment in the Baltimore streets. This was the first full regiment to respond to President Lincoln's call for troops. After suffering from an assault with stones, clubs, and pistols, which cost three soldiers their lives, a part of the regiment fired on the mob, killing eleven and wounding many others.

The business section of the city was visited in 1904 by a conflagration that swept over one hundred and fifty acres and destroyed property to the value of $70,000,000. Yet the city rose from the ruins with magic swiftness, and in the upbuilding streets were widened, skyscrapers erected, smooth pavements laid where before there had been cobble, and sewers were substituted for cesspools, and for domestic drainage which had been emptied into the wayside gutters.

Baltimore is called the "Monumental City" on account of the number of commemorative structures in its public squares. It has the noblest forest park in the United States, a six-hundred-acre tract of ancient woodland known as Druid Hill. In Westminster Presbyterian Churchyard is the grave of Edgar Allan Poe, who died in the city. Old Fort McHenry is worthy of a visit; and so are the Walters' Art Gallery, one of the finest in America, and the big Lexington Market, which picturesquely illustrates Southern produce

and manners. Of all the city's various institutions none has brought it more honor than the University and Hospital which bear the name of Johns Hopkins. He founded and endowed them with wealth amassed as a Baltimore merchant.

Oyster Boats in the Lower Potomac

The first American telegraph line was built from Baltimore to Washington, forty-two miles, in 1844. On the road to Washington, ten miles from Baltimore, is the town of Relay, so named because here were changed the horses that drew the cars on the first passenger railway in America. Construction of the railway was begun July 4, 1828. The first locomotive used on the Baltimore and Ohio tracks was the "Tom Thumb," made by Peter Cooper, who served as its engineer when it made a thirty-mile trial trip to Ellicotts Mills and back to Baltimore, in August, 1830.

The Church John Brown Attended when Plotting to Capture Harper's Ferry

Maryland is almost cut in two by Chesapeake Bay, the largest inlet on the Atlantic coast of the United States. The Bay is two hundred miles long and from ten to twenty broad, and is

navigable for the largest vessels. It is a favorite resort for sportsmen, and its ducks, fish, terrapin, and oysters have a wide reputation. Baltimore is especially noted for the size of its oyster fleet, which is in part sailing vessels and in part little steamers.

Quaint old Annapolis, twenty-seven miles south of Baltimore, on the banks of the Severn River, with the great Bay near at hand, is the capital of the state. The seat of government was moved thither from St. Marys in 1694. During the colonial period it was one of the most important social centers, and ranked with New York, Philadelphia, and Charleston in its display of wealth and fashion. Dinners, parties, and balls were numerous, and card playing, gambling, horse racing, cockfighting, and dueling were indulged in with fervor. Here is the United States Naval Academy, opened in 1845, and here, on the grounds of St. John's College, is the famous "Tree of Liberty"—a very old tulip tree with a girth of thirty feet. Beneath this tree's spreading branches the early settlers, who built their first huts here in 1649, made a treaty with the Indians. Annapolis still retains much of its old-time appearance, and the traveler finds delight in the quiet streets, where low and broad houses of red brick, that have white facings and columned porticos wreathed with creepers, stand in gardens of blooming flowers and shrubs.

The Burnside Bridge, Antietam Battlefield

One of the most attractive features of the Potomac is the Great Falls, fifteen miles above Washington. The river channel here is a chaos of jagged ledges amid which the stream has worn various tortuous channels, and the water surges down through the rocks in a smother of white waves, and then makes a sudden leap to a lower level. The rapids below the falls are a favorite spring resort of shad fishermen, who dip out the fish with scoop nets. The water supply for Washington comes from above the falls, and a half dozen miles downstream is carried across Cabin John Creek by an aqueduct bridge which, with one exception, is the longest stone arch bridge in the world. Jefferson Davis was Secretary of War when the bridge was built, and his name was cut into one of the stones. After he became president of the Confederacy his name was chiseled off, but many years later it was restored by order of President Roosevelt.

Toward the north part of the state is Frederick, where dwelt, in a small brick house at the time of the Civil War, a very old and intensely loyal woman named Barbara Frietchie, born in 1766. She became the heroine of Whittier's famous poem in her exploit with the flag and Stonewall Jackson. Here is buried in Mt. Olivet Cemetery the author of the "Star Spangled Banner," who was born in the vicinity in 1779. Somewhat to the west was fought the great Battle of Antietam in September, 1862. Notable in the fight were the terrible carnage at Bloody Lane and the charge of Gen. Burnside at the stone bridge over Antietam Creek.

In the mountainous northwestern part of the state both life and nature are very individual, primitive, and interesting. Near the West Virginia boundary is Backbone Mountain, the highest in Maryland, with an elevation of 3340 feet. The people of the state have the nickname of "Craw-thumpers," a local name for lobsters. Craw means claw, and the rest of the word is suggested by the slamming motion of the creatures.

The Capitol

XIII

The Nation's Capital

The powerful Algonquin tribe at one time had its capital within the confines of what is now the District of Columbia. Powhatan lived in a wigwam at the present Washington suburb known as Anacostia. Capt. John Smith sailed past here in 1608, and recorded that he found the river full of luscious fish, and its shores lined with ferocious savages. A party of immigrants came to the region in 1660, and by dint of fighting and bargaining made the Indians move on. Then the newcomers began to till the soil.

After the colonies had won their independence, and the question of selecting a permanent site for a capital had to be decided, all agreed that it should be fixed as near as possible to what would remain the center of population, which, in 1790, was twenty-three miles east of Baltimore. Some were convinced that it would stay indefinitely in the

North and others that the tides of humanity would flow toward the warm and fertile South. None foresaw the transformation that would be wrought by railroads and telegraphy, and the teeming civilization destined to develop in the western solitudes. By 1910 the center of population was in Bloomington, Indiana.

When Congress finally agreed in 1790 to establish the capital on the Potomac, it simply designated a strip eighty miles long from which President Washington was to choose the location. Washington himself therefore walked through the wilderness with his surveying instruments and his assistants, and discussed terms and titles at the Georgetown tavern with the owners of the land. The District of Columbia was at first ten miles square and included a tract on each side of the Potomac, but that on the southern side was later relinquished, diminishing the area to sixty-nine square miles. The topographical plan of the city was devised by a French engineer who had served in the Continental Army. He based it on that of Versailles, the seat of government in France. The plan was on such a grand scale, and the actual growth so slow for many years that Washington was often satirically called the "City of Magnificent Distances."

Long straight avenues were cut through the forest, and on September 18, 1793, the southeast corner stone of the Capitol was laid by the President. After the exercises ended the assemblage retired to an extensive booth to partake of a barbecued ox, and presently fifteen volleys of artillery concluded the festival. The White House was begun a year earlier and was ready for use in 1799. John Adams was the first President to occupy it. Mrs. Adams says in one of her letters: "The lighting of the apartments from the kitchen to parlors and chambers is a tax indeed. The great unfinished East Room I make a drying-room to hang my clothes in."

THE WHITE HOUSE

Washington called the place Federal City, but after he died it received his name. When the seat of government was moved from Philadelphia to the new capital in 1800, department records and equipment were sent by vessels, and the clerks and officials journeyed with their families by stage. They found Washington very inadequately prepared to receive them, and those who could not crowd into the few hotels and other buildings had to resort to Georgetown, three miles away, through mud and forest. Only one government building was finished, and Pennsylvania Avenue, the principal thoroughfare, was a bog lined by bushes. The original intention was to build the city on the salubrious high ground immediately around the Capitol, and that the President's house should be a secluded, comfortable retreat amid ample grounds in the suburbs. But the people persisted in building on the low ground adjacent to the broad Pennsylvania Avenue which led from the Capitol to the Executive Mansion.

SAILBOATS UNLOADING WOOD AT WHARVES

On August 24, 1814, a British force of 5000, after defeating a somewhat larger body of Americans, mostly militia, at Bladensburg, encamped at nightfall close to Washington, and details of troops burned the Capitol, White House, Treasury, and Navy Yard. The conflagration lit up the whole surrounding country. Before Mrs. Madison, the wife of the President, left the city, she secured Gilbert Stuart's celebrated portrait of Washington, and the original draft of the Declaration of Independence to carry with her. The stone walls of the President's mansion remained standing, and when the building was restored the stone was painted white to obliterate the marks of the fire. Thus it acquired the name by which it is commonly known.

Washington Monument

The city developed slowly. Very little paving had been done by 1860, and most of the streets were worse than country roads. In summer the dust rose in clouds, and in winter the streets were well-nigh impassable with mud. Street railways did not exist until 1862. The Civil War transformed the city into a vast military camp and hospital. Long trains of army wagons were almost constantly passing through the streets, and at times many churches, public institutions, and the Capitol itself were given up to hospital service.

The dome and two wings of the Capitol were built between

the years 1851 and 1865. The wings are marble, but the main building is sandstone painted white. The dome is one of the stateliest in the world, and its impressiveness is aided by the admirable situation of the building on a dominating hilltop which rises ninety feet above the level of the Potomac. On the tip of the dome is a bronze statue of Liberty, sixteen and one half feet high. The building covers three and one half acres and is in a fifty-acre park. An odd feature of the interior is a Whispering Gallery in the rotunda.

The White House, a trifle over a mile distant, is no less satisfying in its stately simplicity, and its generous grounds, seventy-five acres in extent, that sweep down to the Potomac River. There, by the waterside, is the Washington Monument, a widely-famed architectural feature of the city, chiefly impressive because of its height, for it is an absolutely unornamented, tapering marble shaft, more severely plain than a factory chimney. The obelisk was begun in 1848, but work on it ceased in 1854 when it had reached a height of one hundred and fifty-six feet and was not resumed until 1877. It was finished in 1884, at a cost of $2,000,000. From the floor to the tip it soars up five hundred and fifty-five feet, and for years it was the highest masonry structure in the world. It can be ascended either by a fatiguing climb of its nine hundred steps or by elevator. The walls are fifteen feet thick at the entrance, but

Saint Gaudens' Statue, "Grief," in Rock Creek Cemetery

gradually thin to eighteen inches at the top. The immensity of the monument is only fully appreciated when one stands right at its base, but it is seen to best advantage from an adjacent island park.

A Washington Canal

Summer heat and winter bleakness detract from the charm of the city, and the ideal months for a visit are May and October. Of all American cities Washington has the largest negro population — about 100,000, but New York and New Orleans are close seconds. Everywhere are the vast structures necessary for carrying on the nation's business. On the same hill occupied by the Capitol is the enormous Congressional Library, finished in 1897 at a cost of $6,000,000, and capable of containing four and one half million volumes. Its sumptuous adornments of painting, sculpture, colored marbles, and gilding have special interest. The Bureau of Engraving and Printing is the largest printing plant in the world. Here you can see paper money, bonds, and stamps in the process of manufacture, and visit an exhibit of old-time fractional currency — "shinplasters" — and see a $10,000 gold certificate, the largest note issued. Among the many treasures at the Museum of Natural History are the Roosevelt African trophies, complete group studies of North American Indians, showing their habits and ceremonies, and exhibits illustrating early man in various countries. The Botanic Gardens and Smithsonian Institution also have exceptional attractions.

The Union Railway Station is a fitting companion to the best of the government buildings in architectural beauty and size. Many wonderful paintings can be seen at the Corcoran Gallery and the National Gallery of Art. On 10th Street is Ford's Theater where Lincoln was shot. Just across the street is the house in which he died, and which is now a repository for Lincoln relics. Near by is Baptist Alley through which John Wilkes Booth escaped. Rock Creek Cemetery should be visited, if for no other reason, because it contains Saint Gaudens' noble monument to Mrs. Henry Adams. The city wharves along the Potomac are not without touches of the picturesque, and a canal comes into the place high up on the north bank of the river, to which it descends by a series of locks. Coal brought from the mines in the Cumberland Mountains is the ordinary canal boat cargo.

Within easy reach of Washington are various noteworthy attractions, including Arlington, which was the home of Gen. Lee, old Alexandria, Mt. Vernon, and the Great Falls of the Potomac.

Old Yorktown

XIV

Virginia

The first settlers of Virginia were a colony of gentlemen of fortune, and persons of no occupation, twelve laborers, and a few mechanics, somewhat over one hundred in all, and more intent on finding gold than on making homes in the wilderness. These were the founders of Jamestown, about thirty-five miles from Chesapeake Bay up the James River. They arrived May 13, 1607. Diseases swept off half of them the first summer. Had it not been for Capt. John Smith they all would have returned to England. Smith was a leader with ability to rule. He punished idleness with starvation. To cure profane swearing he had a daily account kept of a man's oaths, and at night, as a penalty for each oath, he poured a can of cold water down the offender's sleeve.

Jamestown is on an island of about 1600 acres, separated from the mainland by a creek a few rods wide. In a little grove at the west end of the island is what is left of the old settlement — a few graves and a ruinous brick church tower,

close to the shore of the broad river. Here, too, are the heavy earthworks of a fort that was one of the outlying defenses of Richmond in the Civil War. A neighboring grassy level was the "Courting Green," or "Kissing Meadow," where was auctioned in the year 1619 "a shipload of respectable maidens for wives to the planters." You can also visit the spot on which were sold that same year twenty "negars" brought to Jamestown by a Dutch man-of-war. This was the beginning of negro slavery in the United States. The church, now represented by the ruined tower, was erected about 1680. In an earlier wooden church Pocahontas was married to John Rolfe in 1614. Many Virginians and others are proud of their descent from Pocahontas. Two of her descendants were Presidents William Henry Harrison and Benjamin Harrison. Another became the wife of President Wilson in 1915. Jamestown was burned in 1676 during Bacon's Rebellion, and nothing was left standing except a few blackened chimneys. The town was rebuilt, but when it was burned a second time, toward the close of the century, it was abandoned.

Ruins of Old Church, Jamestown

Williamsburg, seven miles distant, became the seat of government in 1699, and the authorities began laying out the streets to make W and

Smithfield Church, Erected in 1632

M, the initials of the English king and queen, but this plan was soon abandoned as inconvenient. The place never attained a population of 2000, yet in the events that preceded the Revolution it was not only the capital of Virginia, but in many ways the capital of the entire group of colonies. On a memorable day in 1765 Patrick Henry offered here his famous resolutions against the Stamp Act. Virginia was a leader by reason of the character of its public men, and because it was the largest and most populous of the thirteen colonies. The state is indebted for its name to Elizabeth, the virgin queen, who originally gave this name to all the English possessions in America. It is called the "Old Dominion" because Charles II recognized Virginia as an independent member of his empire. The governor of the colony had proclaimed him King of England, Scotland, Ireland, and Virginia before he actually became king in his own land, and when this caused trouble there, had invited him to come and be King of Virginia. Of special interest in Williamsburg are the Court House, built in 1769, and used continuously since then, the Poor Debtors' Prison, the Bruton Parish Church, which dates in its present form from 1710, and William and Mary College, established in 1693. The church used to have among its regular attendants the governor and his staff and the members of the House of Burgesses. Its original colonial characteristics have been recently restored. The College, though its students had never exceeded one hundred and fifty until

latterly, numbers among its graduates a remarkable list of famous men, including three presidents of the United States. Virginia itself is known as the "Mother of Presidents," for it is the birthplace of four of the first five, and of eight of the entire twenty-seven.

Twelve miles east of Williamsburg is picturesque old Yorktown, near the mouth of the York River. Here Cornwallis was besieged for two months and then, after an eight-day bombardment at close quarters, surrendered to George Washington October 19, 1781. The town's venerable houses, great gnarled trees, and grass-grown earthworks, and the wild little glens that gash the bluff on which it stands are all delightful.

Near the mouth of the James River is Norfolk, one of the most thriving Atlantic seaports of the South. Round about it is a wonderful truck-producing region. Just across the Elizabeth River is Portsmouth, the location of one of the government's large navy yards. Virginia Beach, directly east, on the shore of the ocean, offers surf bathing and good fishing. Just above Norfolk the Elizabeth River joins Hampton Roads, one of the finest harbors in the world, where there is anchorage for the combined fleets of the nations. One calm Saturday afternoon in March, 1862, the Confederate ironclad, *Merrimac,* attacked several of the finest Union vessels that lay in the roadstead, destroyed two, and would have completed its triumph the next day but for the timely arrival that night from New York of the *Monitor,* the first turret vessel ever used. The *Merrimac,* aptly described as "a huge half-submerged crocodile," was vanquished in the most famous of all naval duels by the *Monitor,* which was likened to "a cheese box on a raft," and naval warfare was revolutionized. The day of the wooden warship was gone.

Old Point Comfort, at the entrance to Hampton Roads,

The White House of the Confederacy

with Chesapeake Bay opening northward, has long been a favorite seaside resort. Its name was conferred by Capt. John Smith in gratitude for the shelter it afforded his vessel from the open sea. Here is Fortress Monroe, the most elaborate fortification in the United States. The stone ramparts are about two miles in circumference and inclose an eighty-acre area which resembles a beautiful park. Outside of the rampart is a broad moat. Jefferson Davis was confined in the fortress for a year and a half after the Civil War, and then was released without a trial. Four miles distant is located the well-known Hampton Normal and Agricultural Institute for Negroes and Indians, and not far beyond that is Newport News through which passes an enormous tonnage for or from the seagoing ships. On the other side of the James River, about a dozen miles to the west, is one of the oldest churches in Virginia, at Smithfield. It was erected in 1632, but for half a century after 1836 the building was abandoned, and little survived except the brick walls. Then

Old Homes in Fredericksburg

it was restored, and in doing so about 2000 bricks that had been in the old church at Jamestown were used. Some twenty miles south of Smithfield is Suffolk, the world's greatest peanut market. This preëminence has been achieved mainly because of its location and the fact that six railroads entering Suffolk traverse the largest and most productive section of the great peanut belt, which embraces more than thirty counties in Virginia and North Carolina. The Great Dismal Swamp can be easily visited from Suffolk. It is about forty miles long and nearly as wide, is intersected by canals, and yields a large quantity of cedar, cypress, and other timber. A man can be hired at Suffolk to paddle the tourist in a canoe ten miles into the Swamp as far as Lake Drummond, and back by the Jericho Run Canal.

Richmond, the largest place in the state, is at the head of navigation on the James River, where the stream makes its way in little cascades amid a maze of diminutive islands. It was founded in 1733 on land that had belonged to the celebrated chief, Powhatan. It had only a few hundred inhabitants when it was made the capital of the state, in 1780. Richmond became the seat of government of the seceding states in 1861, and during the Civil War its capture was the chief object of the Union troops. It was defended with great obstinacy, and when the Confederates evacuated the city, April 2, 1865, they set fires in the business section, and a large part of the place was destroyed. About one third of the population are negroes, who are mostly employed in the tobacco factories, where they amuse themselves as they work in singing the quaint old plantation melodies. The most ancient building in the city is the "Old Stone House" on Main Street, erected in 1737. It is now a museum of relics and curiosities. A chief attraction of Richmond is Capitol Square, with its noble trees and emerald lawn spreading over an area of twelve acres around the

State House. The building was finished in 1789. Here the Congress of the Confederacy met in 1862 and continued in session until April, 1865, when it adjourned never to meet again. In the rotunda of the building is the most valuable piece of marble in America — Houdon's statue of Washington, modeled from life, and said to be the most accurate representation of Washington in existence. The Capitol grounds contain Crawford's colossal equestrian statue of Washington, which is one of the finest bronzes in the world.

Arlington House, the Home of Gen. Lee

At the corner of Broad and 24th streets is old St. John's Church, the meeting place of the Virginia Convention of 1775. The pew is pointed out in which Patrick Henry made his immortal "Give me liberty or death" speech. The famous orator was born in 1736 at Studley, 20 miles northeast of Richmond. On Broad Street is the Monumental Church erected on the site of a theater destroyed by fire one December evening in 1811. The governor of the state and seventy-one other persons perished in the flames. In St. Paul's Church, on the west side of Capitol Square, Jefferson Davis was seated when a dispatch from Gen. Lee was delivered to him announcing that Richmond must be evacuated. At the corner of 12th and Clay streets is the "White House of the Confederacy" occupied for three years by Mr. Davis, and now a museum of Confederate relics. The plain brick building occupied by Gen. Lee is also preserved. A favorite drive is to Hollywood Cemetery, which nature and art have united to beautify. Here sleep

many of Virginia's famous sons, including Monroe and Tyler, Presidents of the United States, and Jefferson Davis, president of the Confederacy. A pyramidal monument of granite overgrown with vines commemorates 16,000 Confederate soldiers buried there. Battles were fought in all the region round, and the fortified lines that protected the city are visible in various places. Among the more important battles were Seven Pines, Cold Harbor, and Malvern Hill.

Warwick Park, a popular resort just below Richmond on the James River, is the site of Powhatan's dwelling where Pocahontas, then twelve years old, saved the life of Captain John Smith. Farther down the river, fourteen and one half miles from Richmond, is Varina, the home of Pocahontas and her husband, John Rolfe.

Christ Church, Alexandria

Petersburg, thirty miles south of Richmond, was the center of the final operations of the Civil War, and thirteen pitched battles were fought in the neighborhood. One of the best-known engagements was that of the Old Crater, east of the city. At Appomattox Court House, about eighty miles west of Richmond, the war ended April 9, 1865, in the surrender of Gen. Lee to Gen. Grant. The quaint old Southern city of Fredericksburg, halfway between Richmond and Washington, is another center of Civil

War interest. It was the scene of a fiercely contested battle in 1862, and the next year the Battle of Chancellorsville was fought eleven miles to the west, and the year after that the Battle of the Wilderness occurred a few miles farther away in that direction. Within a mile of Chancellorsville Stonewall Jackson was fatally wounded by his own men during the battle, and a monument in the lonely woodland marks the spot. Washington spent his boyhood near Fredericksburg, where his father was agent for some iron works. The family dwelling was a four-room house with outside chimneys, just below the town on the other side of the Rappahannock. There his mother died in 1789.

Mt. Vernon

Robert E. Lee was born in 1807 at Stratford about thirty miles up the Potomac from Chesapeake Bay, but when the Civil War began he was living on a Virginia height that overlooked the Potomac and Washington. His dwelling, with its columned portico, was known as Arlington House. It was built in 1802 by Lee's father-in-law, who was a grandson of Martha Washington. Lee went to Richmond to take command of the Virginia troops, and the house and estate of 1000 acres were confiscated. The grounds were converted into a Federal camp, a hospital was established there, and in 1867 the property became a national cemetery. On the slopes are long serried lines of tombstones by thousands. One massive granite memorial covers the remains of 2000 unknown dead. Among the more famous

The Shenandoah River

men of the army and navy buried here are General Sheridan and Admiral Porter.

Ten miles south of Washington is Alexandria, which once aspired to be the nation's capital. One should visit the wharves and the market place, the Marshall House, where Col. Ellsworth, the first man to die in the Civil War, was killed, and go into Christ Church where Washington used to worship.

Six miles farther south is Mt. Vernon. It is easily and quickly accessible from Washington by trolley, but a pleasanter way to reach it is by boat. The serene old mansion standing on an eminence that commands a beautiful view of the Potomac was built in 1743 by Washington's half-brother Lawrence, who named it in honor of Admiral Vernon under whom he had served. Lawrence died, and Washington came here to live and carry on the 2000-acre farm soon after his marriage in 1759. Here he died forty years later, and his remains repose in a tomb in a quiet nook of the grounds.

In July, 1861, was fought the Battle of Bull Run thirty miles west of Washington. There the Southern General Jackson earned the name of Stonewall. On the night after the battle the Union troops retreated in a panic to Washington, and the result of this first important battle of the war

encouraged the South to believe that its cause would quickly triumph.

In the northwestern part of the state, between the Blue Ridge and Alleghany Mountains, is the Shenandoah Valley, the settlement of which was begun about 1730 by the Scotch-Irish. One of the oldest of their churches is the Tuscarora Meeting-house which still stands near Martinsburg. A great deal of fighting was done in the Valley during the Civil War, and Winchester was raided by the opposing forces many times. "Sheridan's Ride," which narrowly saved his army and turned defeat into victory, was from Winchester south along the Valley Pike to Cedar Creek. About forty miles beyond Winchester in this direction are the Caverns of Luray, discovered in 1878, and justly ranked among the most wonderful natural phenomena of America. They are unequaled for their profuse decorations of stalactites and stalagmites. Five miles to the east is Stony Man, one of the highest summits of the Blue Ridge. A trip to its top makes a pleasant one-day horseback excursion, and the view from its summit is ample reward. The scenery of the valley, as one travels south, is increasingly picturesque. Fourteen miles north of Basic City is

Natural Bridge

Weyer's Cave, better known as the Grottoes of the Shenandoah. It is notable both for its size and its subterranean wonders. At Staunton, in this vicinity, President Wilson was born in 1856. Farther south is Lexington, where are buried Robert E. Lee and Stonewall Jackson.

Falling Springs, near Covington

Seven miles from where the James River breaks through the Blue Ridge, by a magnificent gorge at Balcony Falls, is the famous Natural Bridge. Its arch is two hundred and fifteen feet high, ninety feet wide, and has a span of one hundred feet. The crown of the arch is forty feet thick, and over it passes a public road. Down below is a little stream. Back among the mountains to the northwest is Hot Springs, which was a popular resort even as long ago as 1838, when the only means of travel thither was by saddle horse and stage coach. It is 2500 feet above the sea level. Not far from here are three tributaries of the James, called Bull Pasture, Cow Pasture, and Calf Pasture rivers. Also near at hand is the old Windy Cove Church, built in 1749. At that time hostile Indians were so numerous that sentinels were kept on duty at the church during service, and guns were stacked inside. Down on the southwestern border of the state in Grayson County is Mt. Rogers, Virginia's loftiest height, with an altitude of 5719 feet.

About seventy-five miles northwest of Richmond Thomas Jefferson was born in 1743, a little east of Charlottesville, at Shadwell. His father's estate included a hill with steep craggy sides, three miles west of Charlottesville, and there he built in later life what was one of the finest residences in the South, surrounded by beautiful lawns, groves, and gardens. He called the place Monticello, an Italian name that means Little Mountain. To it he retired from the presidency in 1809, and the place at once became the Mecca for a host of visitors and admirers. Friends, kindred, and the public generally came, and some arrived in families, bringing babies, nurses, drivers, and horses, perhaps to spend days or weeks at a time. Crowds would stand about the house for hours, watching to see him come forth, until in desperation he would fly to his farm, Poplar Forest, in Bedford County; and his comment, that "Political honors are but splendid torments," expressed his feeling. He died at Monticello, July 4, 1826, while the nation was celebrating the fiftieth anniversary of the Declaration of Independence which he had written, and on the same day that his predecessor as President, John Adams, died in New England. His grave is beside the road leading to the house.

MONTICELLO, THE HOME OF THOMAS JEFFERSON

The people of Virginia are nicknamed "Beadles," a title inherited from colonial days through the introduction then of the English beadles, who were minor court and parish officials.

The South Branch of the Potomac

XV

West Virginia

Most of the boundaries of the state are formed by rivers or mountain ridges, and as a consequence its outlines are very irregular. If you will look at the map you will see why it is called the "Panhandle State." The people have been nicknamed "Panhandlers." It was originally a part of Virginia. About 1750 an attempt was made to have the West Virginia region established as a colony with the name Vandalia. There was a similar effort during the Revolution to create a state here beyond the Alleghanies to be called Westsylvania. But no change was made until the outbreak of the Rebellion. Then Virginia seceded and this western portion prepared to organize a new state to be called Kanawha. The plan succeeded except in the matter of the name, and the state government was formally inaugurated at Wheeling in June, 1863. Seven years later Charleston, down

in the central part of the state, was made the capital, but in 1875 the seat of government was shifted back to Wheeling in that extreme northern outjutting streak of territory between Ohio and Pennsylvania. One more shift made Charleston again the capital in 1885.

The earliest settlement in West Virginia was Shepherdstown on the Potomac, founded by Germans from Pennsylvania. Other villages were soon established, but were mostly destroyed during the French and Indian War. In 1774 a body of militia dealt the Shawnee chieftain, Cornstalk, a crushing blow at Point Pleasant in the western part of the state, where the Kanawha River joins the Ohio.

The most famous place in West Virginia is Harpers Ferry, and it is one of the most picturesque of American villages. The surrounding scenery is beautiful and impressive — steep wooded mountains, cliffs, and tangled hills, and the Shenandoah and Potomac rivers uniting in the valley depths. In the angle between the streams the town is built tier on tier along the abrupt and lofty slopes. Most of the structures are of brick or stone, and they have immense chimneys, and quaint piazzas and porches. To this vicinity John Brown came in 1859 with several companions and rented a farm five miles distant on the Maryland side of the Potomac. On a Sunday night in October he and his band, twenty-three in all, five of whom were negroes, took possession of the bridges across the rivers and captured the United States armory and arsenal located in the town. But the next morning the townspeople got out their guns, and other armed men flocked in from the country around. There was firing back and forth all day, and Brown's situation became so desperate that the invaders took refuge in a little fire engine house near the railway. That evening eighty marines commanded by Col. Robert E. Lee reached Harpers Ferry, and at dawn on the morrow captured the stronghold. One

A Harpers Ferry Highway

marine was killed, five of the townspeople lost their lives, and ten of the raiders were killed. Brown and such of his fellows as were captured were imprisoned and tried at Charlestown, ten miles to the southwest, and there he and six others were hung. The jail and adjacent courthouse still stand, and it is a curious fact that when snow falls it quickly melts in a path which leads diagonally across the street from one to the other. There will be snow over all the rest of the street, but not on the path John Brown trod in going to and from the courthouse. You might think that this was miraculous testimony that John Brown was a martyr saint, but another explanation is that the courthouse is heated from the jail, and the hot pipes run under the street paving. The armory and arsenal at Harpers Ferry were destroyed during the Civil War and have not been rebuilt. John Brown's Fort, as the brick engine house was called after the foray, has been removed to a small park on the Shenandoah, about four miles from the town.

Table Rock near Wheeling

Wheeling, the state's largest city, is an important trading and manufacturing center. On its borders, at the crest of Fulton Hill, is what is known as McCulloch's Leap. McCulloch, a celebrated Indian fighter, escaped pursuing savages here in 1777 by riding on his horse down the steep three-hundred-foot declivity and crossing Wheeling Creek. It was a scramble, rather than a leap.

The state is notable for its great resources in coal, oil, and gas, and it is a land of wonderful mountains and magnificent forests. Its loftiest height is Spruce Knob in Pendleton County, in the eastern part of the state, with an elevation of 4860 feet. The highland sections have won repute for their pure and healthful air. There are a number of famous mineral springs among the mountains. White Sulphur Springs is perhaps the most noteworthy of these. Persons were treated there as early as 1778. The place is environed by mountains that have much scenic charm.

Prehistoric Mound at Moundsville

About a dozen miles south of Wheeling, near Moundsville, is Grave Creek Mound, one of the largest relics of the mound-builders. Its form is conical with a height of seventy feet, and a base diameter of three hundred and twenty feet. Two sepulchral chambers were found in it, and in one of these was a skeleton adorned with beads, copper bracelets, and plates of mica. In the other chamber were two skeletons, one adorned with beads, and a second unadorned.

Stonewall Jackson was born in the northern part of the state at Clarksburg in 1824.

The Lumbee River, near Pinehurst

XVI

North Carolina

The first English colony in America was established in the summer of 1585 on Roanoke Island off the coast of the "Old North State" at the entrance to Albemarle Sound. A year earlier, Walter Raleigh, who had the permission of Queen Elizabeth to search for any lands not owned by Christian people and "the same to occupy and enjoy forever," sent two ships across the Atlantic to search for a good place to plant a colony. When the captains returned, after visiting some of the islands and portions of the mainland of North Carolina, they reported that they thought the soil of the region was "the most plentiful, sweet, fruitful, and wholesome of the whole world." The queen showed her pleasure by making Raleigh a knight, and henceforth he was called Sir Walter Raleigh. His colony did not prosper. After a year of hardships the settlers were picked up and carried to England by Sir Francis Drake, who chanced to voyage to their vicinity. They had been gone only fourteen days when three ships sent by Raleigh arrived. These left fifteen men to hold the country for England, and returned.

The following spring Raleigh sent another colony consisting of ninety-one men, seventeen women, and nine boys, with John White for governor. Meanwhile the fifteen men left on the island had been attacked by Indians, who killed several; and the rest had probably been drowned in a boat while trying to escape. But this did not deter the newcomers from establishing themselves in this same place where their predecessors had dwelt. Not long after they landed, Virginia Dare was born. She was the first English child born on the soil of the United States. Friendly Indians, who admired the beauty of the fair-skinned baby, called her the White Fawn, and her mother the White Doe. Governor White soon went back to England for supplies, and was detained for three years by war with Spain. When he again arrived at Roanoke Island he found only silence and decay, and no searching there or on the adjacent mainland gave any clew as to what had become of the colony. But many years afterward children were observed among the local Indians with light hair and eyes, and it was believed that they were descendants of the Roanoke settlers who had been adopted by native tribes.

In 1629 King Charles I established as a province all the land from Albemarle Sound to the St. Johns River and directed that it be called Carolina, a name derived from the Latin form of his own name. For exactly a century afterward there was only one Carolina. Then the region was

Cape Hatteras Lighthouse

divided into North and South colonies. The earliest settlements destined to be permanent were made on the northeastern borders, beside the Chowan and Roanoke rivers, by Virginians in 1653.

The lonely and dangerous waters off the North Carolina coast used to be a haunt of pirates, one of the most active of whom was Blackbeard. On his swift-sailing ship, the *Adventure,* he was the terror of Southern commerce. He had a home not far from Bath, a little way inland from Pamlico Sound, on the banks of a river of the same name. After some of his wild cruises he would swagger into the town, and with oaths and savage threats drive all the citizens from the streets. At length he seemed to grow weary of piracy, settled down on shore, and married his thirteenth wife. Pretty soon, however, he went off to sea again with a rollicking crowd of cutthroats. A Virginia schooner sent to put a stop to his marauding fell in with him in 1718 off Ocracoke Inlet, which connects the Atlantic with Pamlico Sound, about thirty miles southwest of Cape Hatteras. The pirates were overcome, and Blackbeard was slain. The victors cut off his head, fastened it at the bow of their craft, and threw the body into the sea. Thereupon the head began to call, "Come on, Robert!" and the body swam three times around the schooner. The vessel sailed home in triumph with the ghastly pirate head at its bow, and later the skull was made into a silver-rimmed bowl and kept as a trophy of the battle.

North Carolina has always been a rural state — one of planters and farmers. At the end of one hundred years of settlement there were only a half dozen villages, none of which had as many as six hundred inhabitants. Charlotte, an important cotton manufacturing town, is the largest place in the state. Lord Cornwallis more than once had his headquarters there. He described it as "a hornets' nest," of which title the inhabitants are still proud. At the opening

of the Civil War there were thirty-nine small cotton mills in the state that employed an average of forty-five hands, while a half century later there were seven times as many mills each employing three times as many hands. At Salisbury, forty miles north of Charlotte, was one of the chief Confederate prisons, and it has a National Cemetery which contains the graves of more than 12,000 soldiers who died in captivity there.

A Pine Woods Road

At Holmans Ford, a little to the north of Salisbury, is a granite shaft fifteen feet high in the form of an Indian arrowhead, erected to the memory of Daniel Boone. Close by is a log cabin, which is an exact duplicate of the one that formerly stood there, and which was Boone's home for nineteen years of his young manhood. On the banks of the Yadkin River, not far away, is Boone's Cave, to which the family retreated when closely pressed by savages.

The State House, Raleigh

Raleigh, the "City of Oaks," on high ground near the center of the state, has been the capital since 1794. In the early years several villages served in turn as

Mountain Home near Pisgah Ridge

the seat of government, with Newbern for the final one after 1746. Southwest of Raleigh is the important health and recreation resort, Pinehurst. From November, when the colors of autumn are at their best, until May, when the grandeur of the Southern spring has reached its climax, the region is particularly charming. Perhaps the most exciting and strenuous of the pastimes which Pinehurst has to offer is fox-hunting. Gray foxes abound, and they lead the pack of twenty hounds, close followed by the hunters, in a merry chase, which almost always ends in securing the fox.

Western North Carolina is the "Land of the Sky." Here are the Great Smoky Mountains along the boundary, and the parallel range of the Blue Ridge about twenty-five miles to the east. Several spurs reach out from the main chains into the region between, and one of these, the Black Mountains, contains nineteen peaks over 6000 feet high. The variety of scenery is endless. Even the

Grandfather Mountain

highest mountains are densely wooded to their tops. In this region is the famous health resort of Asheville, which is visited by 70,000 persons annually. Southerners frequent it for its comparative coolness in summer, and Northerners for its mildness in the cooler part of the year. Mt. Mitchell, the highest peak in the United States east of the Rocky Mountains, rises eighteen miles east of Asheville to a height of 6711 feet. Its name is derived from Prof. Elisha Mitchell, who lost his life by a fall from a precipice in 1857, while

The French Broad River in Western North Carolina

determining the height of the peak. He is buried at the summit. Near Asheville is the famous estate of Biltmore, with its 130,000 acres of grounds and its mansion which cost $4,000,000.

About thirty miles west of Charlotte near the South Carolina line was fought the famous Battle of Kings Mountain in the autumn of 1780. Major Ferguson, with a British force of 1200, was raiding the back country, and there gathered to oppose him a motley crowd of Indian fighters and hunters, farmers and mountain rangers, wearing sprigs of hemlock in their hats, and every man a dead shot with his gun. When the Major heard of the approach of the "dirty mongrels," as he called them, he posted his army on an isolated hill, which he named Kings Mountain, and declared

that all the "rebels out of hell" could not drive him from it. They only slightly outnumbered the British, yet they per-

sistently pressed up the hill on every side. At length, when four hundred and fifty-six of the defenders, including their

commander, lay dead, the rest surrendered. Only twenty-eight Americans were slain. After the battle, the victors hied away to their crude civilization beyond the Alleghanies. This was their only service in the war, but it turned the tide at a dark moment in favor of America.

The people of the state are called "Tar-heels," a sobriquet given during the Civil War because so many soldiers came from the pineries with tar on their footwear.

Plantation House and Live Oaks

XVII

South Carolina

The earliest permanent settlement in the "Palmetto State" was made in 1670 on the banks of the Ashley River at Albemarle Point, three miles from the present city of Charleston; but of the town which grew up there nothing now remains except a ditch or two, and the name Old Town Creek, which is that of a little stream forming one of the town boundaries. Most of the settlers shifted their homes within a few years and established themselves where Charleston now is. At the opening of the Revolution, Charleston was one of the three leading seaports of the country. In front of the city, on Sullivans Island, the Americans erected a strong breastwork of palmetto logs and sandbags. The British fleet attacked the rude fort unsuccessfully on June 28, 1776. In the thick of the fight the staff that held aloft the American flag was broken by a cannon ball, and the flag fell outside

the fort. Sergt. William Jasper, an illiterate youth who could not even read, promptly leaped down the embrasure in the face of the enemy's fire, caught up the fallen banner, and planted it on the sandbags of the bastion, thus winning for himself a place among the country's heroes. The British failed in another attack on Charleston in 1779, but were successful the next year after a four-months' siege.

A railroad, one hundred and thirty-six miles in length, which was completed in 1833 from Charleston to Hamburg on the Savannah River opposite Augusta, Georgia, was at that time the longest in the world. Regular passenger service was begun on the first half dozen miles out of Charleston on January 15, 1831. Not long afterward the negro fireman on the locomotive fastened the safety valve shut because he did not like the noise of the escaping steam. As a result, the boiler exploded, scalding the engineer severely and injuring the fireman so that he died two days later. After that the locomotive was regarded with suspicion, and for a long time a "barrier car" piled high with cotton bales was interposed between the engine and the train to protect the passengers.

St. Michael's Church, Charleston

Fort Sumter

Osceola, the celebrated Seminole chief, died in 1838 in Fort Moultrie on Sullivans Island after a few weeks' imprisonment.

When the Civil War was imminent, South Carolina was the first state to secede. Its legislature passed the ordinance of secession by unanimous vote in Charleston on December 20, 1860. When April came, Fort Sumter in the harbor was bombarded and forced to surrender. For most of the remainder of the war the city was blockaded and shelled by a Union fleet.

Since the war the greatest event in the history of Charleston is the destruction of half of it by an earthquake on the night of August 31, 1886, with a loss of $5,000,000. As a shipping port the place handles large quantities of cotton and rice, but its prosperity depends chiefly on the trade in phosphate, large deposits of which underlie the region. It has been called "the aristocratic capital of the United States." Certainly the aristocratic aspect of its homes conforms to that title. The eye delights in beholding the great cool-looking mansions with their broad verandas, and their snug little formal gardens and fine trees, and the marvelous profusion of flowers and vines. Charleston is the largest place in the state.

Old Plantation Cabins

The town's most interesting historic building is the Colonial Exchange, erected in 1771. When Washington visited Charleston after the Revolution, a ball and reception in his honor were given in this building. St. Philip's Church, dating from 1835, has a steeple nearly two hundred feet high, from which there shines a beacon light at night to guide mariners at sea. The finest piece of colonial architecture in the South is St. Michael's Church, first opened for service in 1761. When the British gained possession of the town, they stabled their horses in the church. It has a very musical chime of eight bells. In the Civil War these were sent to Columbia for safekeeping, but that place was looted and burned, and the bells were so damaged that they were shipped to England to be recast. When the vessel that brought them back arrived, the people went in procession to receive the beloved bells, and with prayers and thanksgiving replaced them in the church tower. Their music, which is perhaps the most characteristic of all the city's sounds, has been called "the voice of Charleston." The city takes especial pride in the district around the Battery, which is a grassy park thickset with sturdy oaks. The good folks who daily promenade this park little think that they are trampling over the resting place of fifty pirates who were captured in 1718 and hanged and buried on what was then White Point.

A Cotton Picker at His Cabin Well

Three important battles were fought in South Carolina during the Revolution. The first was at what is now the favorite winter resort of Camden thirty-three miles northeast of Columbia, in August, 1780. Three thousand patriot troops under the incompetent management of General Gates suffered the most disastrous defeat ever inflicted on an American army. Cornwallis, the British commander, though he had only two thousand men, swept the opposing army out of existence. The next January nine hundred Americans, after retreating before a somewhat larger enemy force led by the brave cavalry commander, Tarleton, made a stand on a grazing ground known as the Cowpens near the state line northwest of Columbia. The British attacked vigorously at daybreak, but were very cleverly out-maneuvered and three quarters of them surrendered. In September the Americans, commanded by Gen. Greene, were again victorious in the Battle of Eutaw Springs, about sixty miles southeast of Columbia.

Brosstown Upper Falls

Charleston, which was the colonial capital of South Carolina, was succeeded by Columbia in 1790 for the sake of a more central situation. The latter is an attractive city with abundant water power, which has resulted in the development

of a considerable manufacturing industry. Here are the largest cotton mills in the South. When the place was captured by the Federals in February, 1865, much of it was burned, including the State House, a convent, several churches, and a vast quantity of cotton. The Confederates and Federals each accused the other of starting the fire, and the question of responsibility for it has never been settled.

About fifty miles southwest of the capital is Aiken, the popular winter resort, surrounded by vast forests of fragrant pines that grow in a soil of white sand. Among the amusements offered are fox-hunting, racing, polo, tennis, cricket, and golfing.

Sassafras Mountain, in the Blue Ridge Range on the North Carolina boundary, is the state's loftiest height, with an altitude of 3548 feet. The people are nicknamed "Weasels," a term more especially applied to the natives of the backwoods.

Two Sisters Ferry, Savannah River

XVIII

Georgia

The first settlement in Georgia was Savannah, on a bluff overlooking the river of the same name, eighteen miles from the sea. Its founder was Gen. Oglethorpe, who wanted to provide an asylum for the poor of England and the Protestants of all nations. Thus the last of the thirteen colonies came into existence. It was named in honor of King George II, who granted the charter. At the time of the Revolutionary War the British captured Savannah, and the next year the Americans were defeated in a determined effort to retake it. In this battle the gallant Jasper, whose exploit with the flag at Fort Moultrie had made him known as the bravest of the brave, was killed while endeavoring to plant an American flag on a redoubt at Spring Hill, now the site of the Georgia

Railway. About three miles from the city, beside the Augusta road, is a spring that bears his name. There he and a comrade captured eight redcoats and released a considerable number of Americans that the British were taking to a prison camp.

The "Forest City," as Savannah is called, is one of the prettiest places in the South. It has more well-kept parks than any other city in the world. There is a small public square at nearly every corner, and one of the wide streets has a double row of big trees running right down the middle with grass under them; and there, on the green lawn, the little children can be seen playing even in midwinter. Originally the small parks were used as market places and rallying points in case of Indian attack. One of Savannah's popular year-round resorts is Tybee Island, and another is Thunderbolt, famous for fish and oysters. There is excellent quail-shooting in the vicinity, and the creeks and marshes are populous with ducks in their season.

The famous Revolutionary general, Nathanael Greene, a native of Rhode Island, moved, after the war, to Georgia, where, in recognition of his services, he was given an estate known as Mulberry Grove not far up the river from Savannah. After the general's death, that shrewd New Englander, Eli Whitney, was a tutor in the Greene

© Detroit Pub. Co.

Wilmington River at Bonaventure

home, and Mrs. Greene suggested that he should attempt to contrive a machine that would pick the seed out of cotton. This resulted in the invention of the ingenious cotton gin which made the whole South opulent. The first machine, completed in 1793, did work in five hours which, if done by hand, would take one man two years.

The first steamship ever built in the United States was owned in Savannah, bore the name of the city, and in April, 1819, sailed for England, where it arrived twenty-two days later.

An unusual attraction for tourists, five miles northwest, on the Savannah River, is the "Hermitage," a plantation of the antebellum days, where the old mansion and slave dwellings may be inspected. But the one thing that every stranger in Savannah goes to see as a matter of course is the ancient and picturesque estate of Bonaventure, four miles east of the city. For a long time this has been used as a cemetery. Here are solemn avenues of gigantic live oaks whose gnarled branches are feathered with ferns and parasitic plants, and draped with pendant swaying masses of gray fairy-like moss that are often four or five feet long. The effect is singularly weird in its charm, and the tombs, urns, and obelisks gleaming here and there among the shadows add to the impressiveness.

A Farmhouse

About one hundred and twenty-five miles up the river is Augusta, settled only two years after Savannah, and with something the same charm in the breadth and beauty of its

streets. Greene Street is especially famous because of its four rows of great trees that form two ample high-arched vernal avenues, and on either side are spacious flower gardens and pleasant dwellings.

Tallulah Falls

Near the center of the state is Macon, an important lumber mart, with a noteworthy peach-growing section roundabout. Here is the Wesleyan Female College, which claims to be the oldest woman's college in the world. It was founded in 1836. Sixty miles southwest is Andersonville, where was the great stockade prison in which so many Union prisoners were confined during the Civil War. After Lee's surrender the commandant of the prison, Captain Wirz, a German by birth, was found guilty of conspiring "in violation of the laws of the war to impair the health and destroy the lives of about 45,000 Federal prisoners held at Andersonville," and was hanged at the Old Capitol Prison in Washington. He was the only Confederate to suffer the death penalty for his part in the war, after peace had been established.

The largest place in Georgia, and also one of the largest in the South, is Atlanta, the "Gate City." It began in 1836 with a single house. This was built on an Indian trail that led to the Chattahoochee River, seven miles distant. A

railroad was projected to the spot, which was called Terminus. Somewhat later this name was changed to Marthasville, in honor of a daughter of the governor of the state. The city's present name was adopted in 1847. During the Civil War Atlanta was of vital importance to the Confederacy as a center of supplies. When Sherman captured it in September, 1864, the doom of the Southern cause was sealed. Two months later he burned the city and started on his famous "March to the Sea," which cut the Confederacy in two. Atlanta recovered rapidly after the war and in 1868 was made the capital of the state. Fifteen railway lines radiate from it, and it is notably progressive and wealthy. That lovable Southern writer, Joel Chandler Harris, author of the immortal Uncle Remus stories, was on the staff of the Atlanta *Constitution* for much of his life. The "Wren's Nest," where he lived, at 214 Gordon Street, is preserved as a memorial. It is a simple homelike house, and the intimate possessions of the author lie about just as he left them. Visitors may see, fastened to a tree by the gate, the old letter box in which a wren built her nest and so gave the house its name.

STONE MOUNTAIN, NEAR ATLANTA

Sixteen miles east of Atlanta is a great smooth granite hump known as Stone Mountain, which is one of America's natural wonders. It is about two miles long and seven hundred and fifty feet high, and there is not a fissure in it. The mountain is to be made a Confederate memorial, and

the granite is to be adorned, some four hundred feet up, by a column of troops of gigantic proportions, marching along a roadway, headed by Lee and Jackson on horseback, the whole to be carved out of the solid rock. The equestrian figures will be fifty or more feet tall, and the procession will cover a strip of perhaps a mile. At the foot of the great rock a

Collecting Barrels of Resin near Ocilla

temple is to be hewn out of the mountain and used as a place for the safe-keeping of Confederate relics and archives.

Georgia's loftiest mountain is Brasstown Bald, 4768 feet high, on the northeastern border of the state. The popular nickname for the people is "Buzzards." Poor whites known as "crackers" are sufficiently numerous to have given Georgia the title of the "Cracker State."

Photo by A. W. Dimock.

TARPON FISHING

XIX

Florida

The "Peninsula State," or the "Everglade State" as it is also called, is the largest commonwealth east of the Mississippi, with the exception of Georgia, which exceeds it in size to a very slight degree. Its length from north to south is about four hundred and fifty miles, and its northern portion extends nearly four hundred miles east and west. No other state can rival its coast line of 1146 miles. Except in the beautiful Tallahassee region the land is level or only gently rolling. Louisiana is the only state which has a lower average elevation. The highest point is Mt. Pleasant, in the extreme northern part, near the southwest corner of Georgia. This mountain attains an altitude of three hundred and one feet.

Florida is a region of abounding waters, and its rivers, creeks, and canals, and the myriad lakes and lagoons are so connected that a canoe or light draft launch can traverse

them in almost any direction throughout the length and breadth of the peninsula. Nor can you follow the waterways far without encountering some kind of wild creature interesting for its own sake and perhaps legitimate prey for rod or gun.

Florida is the most accessible of our nation's winter playgrounds to the mass of the people. They come by train and by steamer and in automobiles from all the states in the Union. The highways have been much improved in recent years, and in many sections the motoring conditions are ideal. Jacksonville is only thirty hours from New York by fast trains. Twelve hours more take one to the southern tip of the state. Thus, within two days time, one may change his winter environment from arctic to tropic; from ice and snow to gentle skies, unchilled waters, ever-blooming flowers, and singing birds — and all this without leaving the mainland of the United States. But persons who come to Florida with the expectation of spending their midwinter in white linen lying on beds of roses under blossoming trees and palms, should change this delusion for the far finer and truer notion of a temperature just cool enough to save a man from degenerating into a luxurious vegetable of laziness, and just warm enough to be tranquilizing. Even if it chances that you have to endure a brisk cold spell, you can find cheer in the knowledge that the North is having a bitter freeze. All the northern half of the state is more or less subject to frosty nights, and not until you get beyond the main-

A Pine Woods Log-team

land well down toward Key West do you reach the frost's limits. The rainy season is in summer. It does not consist of a steady downpour, but of afternoon thunder showers which come up in the heat of the day. Four months is its usual duration.

Improvement in health depends on taking advantage of what the Florida winter has to offer — which is unlimited opportunities for activity. To keep indoors, taking no regular exercise, and with the mind and body unemployed, offers little chance to gain. The climate cannot be too highly praised for children. The winter is one long outdoor playspell for them, and in general they are wholly free from coughs, colds, and other ailments.

In many parts of Florida are interminable stretches of long-leaved pine forests. The rough-barked tapering trunks rise straight as arrows, and lift their plumed tops sixty to one hundred feet in the air. The needles are from twelve to eighteen inches long. The trees are particularly valuable both for timber and for turpentine. Florida is now the center of turpentine production in the United States. Cattle and horses range freely in the woods all the twelve months of the year. Their owners set fires every winter to burn the dry grass and improve the pasturage. The long low lines of flame sweep through the forests, and by day pitchy smoke drifting heavenward shows where the fire has got into thick young growths of pines, while by night the woodland is weird with flickering light.

A Trapper's Home

Old City Gates, St. Augustine

Large areas are covered with dense growths of the saw palmetto, so named because of its spiny-toothed leaf-stalks. It is also called palmetto scrub, which indicates its size and nature. Its relative, the cabbage palmetto, is a beautiful tree with a columnar trunk, that lifts a fan crown fifty or sixty feet in the air. The soft enfolding leaves that surround the central bud somewhat resemble a cabbage in quality, whence comes the tree's name. Palmettos are found as far north as Cape Hatteras, but you do not see them at their best until you get down to Palatka in Florida. There they give the jungle a touch of stateliness and a real tropical picturesqueness.

Florida was discovered by Ponce de Leon. He came from Spain to seek a spring whose waters were said to confer immortal youth on whoever bathed in it. On March 27, 1513, his three vessels arrived within sight of a coast which he called *Terra de Pascua Florida*, Land of Easter Flowers. The name is supposed to refer in part to the time of his discovery and in part to the abounding spring blossoms that he saw and scented. He landed a little south of the mouth of the St. Johns River, and there planted a cross, threw the royal banner to the breeze, and took possession of the country for the Spanish crown. For a month and a half he engaged in an earnest search for the magic fountain, but none of

Cathedral, St. Augustine

the springs in which he bathed served his purpose, and he finally sailed away without having grown any younger. Ponce de Leon visited Florida again in 1521, and he and his men were assailed by savages, probably on the west coast. Several of the Spaniards were slain, and their leader was hit by an arrow which caused his death shortly afterward in Cuba.

In 1539 the conquest of the peninsula was attempted by Fernando de Soto, who had taken a leading part with Pizarro in conquering Peru. He reached Tampa Bay with six hundred and twenty men in June, and made his way north, much harassed by savages, to the vicinity of Tallahassee, where he spent the winter. In the spring, the Spaniards continued their journey, and after many strange and tragic adventures reached the Mississippi River.

As the earliest permanent settlement made by Europeans in the United States, St. Augustine will always have exceptional interest. Capt. Jean Ribaut with a small French fleet visited the coast in 1562 and named the harbor of St. Augustine the River of Dolphins because of the many porpoises he saw there. Two years later another French fleet came with a colony, sailed up the St. Johns a few miles,

and on the south side constructed Fort Caroline on what is now known as St. Johns Bluff. When the Spanish sovereign learned of this colony, he promptly dispatched Pedro Menendez in eleven vessels with 2600 men to exterminate it. Menendez entered an inlet on the coast on St. Augustine's Day in 1565 and gave the saint's name to a fortified settlement he established there. Shortly afterward he led an expedition against Fort Caroline and wiped it out. Meanwhile a French fleet, that had planned to attack the Spaniards, had been wrecked farther down the coast, but most of those on board got to the shore in two parties, one of about two hundred and the other three hundred and fifty, and began to make their way toward Fort Caroline. The smaller party arrived at Matanzas Inlet, twenty miles south of St. Augustine, and camped, unable to cross. Menendez came to their aid with boats, but after getting them to the north side of the inlet treacherously slew all except twelve. He treated one hundred and fifty of the larger party in the same way, sparing only five. The rest of this party

Arch in Fort Marion

One of St. Augustine's Narrow Streets

would not trust themselves to him and retraced their steps. While trying to build a vessel from fragments of the wrecks, a Spanish force attacked them. Some were captured, and the rest fled to the Indian towns. The name of the inlet where so many of the French ended their lives means "the place of slaughter."

In 1586 the famous English sea rover, Sir Francis Drake, plundered and burned St. Augustine, but no sooner was he gone than the people, who had fled at his approach, came back and began rebuilding. Two Indian villages were established close by, north of the town, and one evening in 1598 the Indians slew a priest in the chapel of each village. Later they went to the several other missions up and down the coast and very nearly exterminated the missionaries. There was another Indian outbreak forty years afterward, and a large number of native prisoners were brought to St. Augustine and set to work on the fortifications. They and their descendants were

On the Ocklawaha River

kept at this task for sixty years. In 1665 John Davis, a famous pirate, sailed into the harbor with seven vessels, and again the town was plundered and its wooden portion burned. While England and Spain were at war an expedition of whites and Indians from South Carolina attacked St. Augustine in 1702 by land and by sea. The stone fort of San Marco was nearing completion, and though the town was easily captured, the fort withstood the enemy. Gen. Oglethorpe of Georgia bombarded St. Augustine in 1740 with three batteries located on Anastasia Island, and the entire population of the town, about three thousand, took refuge in the fort, which again proved impregnable.

Mosquito Inlet Lighthouse

Florida was ceded to England in 1762 and ceded back in 1783. It was bought by the United States in 1821. The gray and time-worn old fortress of San Marco standing beside the sea with its gloomy portals and dark chambers is the most fascinating feature of St. Augustine. Its first stone was laid in 1592, the last in 1756, and it covers five acres. It is a complete medieval fortress, and is one of the best preserved specimens in America of the military architecture of its time. The United States changed its name to Fort Marion in honor of a patriot general of the Revolution.

It is built of coquina rock from the far side of Anastasia Island opposite the town. In the center of the old section of the city is the plaza, an attractive stretch of greensward paths, shrubs, and shade trees. While Florida was a part of the British empire at the time of the American Revolution, the sentiment of St. Augustine was intensely loyal, and when the news of the Declaration of Independence was received, Adams and Hancock were burned in effigy on the plaza. At the north end of the plaza is the post office — doubtless the oldest one in the United States. During the Spanish rule it was the governor's palace. Near by is the cathedral, finished in 1797. Its Moorish belfry contains a chime of four bells, the smallest of which bears the date 1682. The buildings in the older parts of the town generally date back to the final period of Spanish occupancy. Many of the dwellings have high-walled gardens full of tropical trees and flowers. St. Georges Street, nineteen feet wide, has been the main business thoroughfare of the place for three centuries. The town is on a peninsula where it only had to guard against land attack from the north. The inner line of three defenses constructed there contained the city gates, which have survived to the present time.

Beside the Indian River

St. Augustine began to develop as a winter resort immediately after the

The Shore of Lake Worth at Palm Beach

Civil War, and this development was increasingly rapid as soon as it was connected by railroad with Jacksonville in 1870. Anastasia Island is easily visited by means of a bridge a half mile long across the water-channel. The island is a mile or two broad in its northerly part and fifteen miles long. Sand dunes, partially overgrown with scrub pine and palmetto, are the predominant feature, and so white is the sand and so fine its texture that it resembles the drifting snows of the remote north. On the far side of the island are the coquina quarries. Coquina is a Spanish word which means shellfish, and this indicates the material of which the rock is composed. It is a natural concrete of tiny shells with here and there a larger shell, and it is both enduring and attractive. South Beach on the island boasts of an alligator farm, where you can see the alligators in all stages of growth, from those just out of the shell to the mature monsters.

The one large river of Florida is the St. Johns. The Indians called it the Walaka, which means chain of lakes. For the seventy-five miles between Palatka and Jacksonville

it is never less than one mile wide, and in places attains a width of six miles. It rises in Saw Grass Lake on the borders of the Everglades, not a dozen miles from the east coast. The water of the upper river is beautifully pure, but below Sanford the river is a dark muddy stream which makes its way through an interminable succession of swamps. Jacksonville is the Florida metropolis. It is the largest orange market in the world. During the Civil War it was almost wiped out. In February, 1864, a Federal army which set forth from the town in pursuit of a Confederate force marched into a trap, fifty miles west, near Olustee, and was disastrously defeated. This was the most important Florida battle in the war. The principal part of Jacksonville was destroyed in May, 1901, by a great conflagration that burned nearly 3000 buildings, entailing a property loss of $15,000,000. There are a number of bathing resorts on the Atlantic coast within reach of the city, and among its suburban attractions is an ostrich farm.

Fifteen miles up the river, at Mandarin, Harriet Beecher Stowe made her winter home from 1868 to 1884. A dozen miles farther south is Green Cove Springs. The spring that has made the place famous is one that discharges 3000 gallons every minute from its green mysterious depths. South of Palatka the river is comparatively narrow, swift, and crooked. Palatka is the starting point of the Ocklawaha steamers. They go south twenty-five miles, then turn west and enter the old forests of the "dark crooked waters," which is what the name of the stream means. The journey ends at Silver Springs, one hundred and ten miles farther on. The voyage is a visit to fairyland. As the river winds along it almost doubles on itself in places. Often it is so narrow that the passengers wonder if the boat will not be obliged to retreat. You can seldom see more than a few hundred yards ahead, but each town reveals some new

Midwinter at Miami

o

attraction. More than nine tenths of the voyage is through a dense growth of partly submerged cypress, and only at a few points does dry land approach the channel. The wild creatures of the bordering swamps are quite fearless, and you will see herons, eagles, and other denizens of the watery forest, and sometimes a timid deer. But the creature which arouses the most interest is the alligator. Several are sure to be seen on any day when the weather is warm, and half a hundred are sighted sometimes. The largest are fully twelve feet long. The latter part of the journey is made at night. A fire of pine knots is kindled in a big iron box on the top of the pilot house, and the light from the resinous yellow flames advances up the dark sinuosities of the stream in a manner that is enchantingly mysterious. The last nine miles of the voyage are on Silver Springs Run, which has its source in Silver Springs Lake. These springs are one of the wonders of the world. They are the outlet of an underground river that daily discharges 300,000,000 gallons of water so clear that the bottom is distinctly visible eighty-five feet down. If you row out on the lake you marvel that such an unseeable water can support anything so substantial as the boat you are in. Twenty miles west of the neighboring city of Ocala is the charming Blue Spring, which derives much of its peculiar beauty from the wonderful vegetation that grows in endless variety of color and form along the rocky dikes and sandbars of the bottom.

The most famous resort section of Florida is the east coast. This is lined almost continuously from end to end with the cottages, mansions, and palaces of people from outside the state who make their homes there during the colder months. Besides, great hotels and popular resort towns are numerous. A peculiar feature of the coast is that the mainland nearly everywhere lies back of salt water lagoons. A series of narrow islands protect it from the ocean's rude waves,

Florida's Sea-going Railway

and afford for small craft an inside route of sheltered navigation. On the outer side of the islands are some splendid stretches of beach. The finest extends forty miles from Matanzas Inlet to Mosquito Inlet. No roadway made by human hands could excel it, and here the racing motor cars break the world's speed records. On the other side of the island is a slender shallow arm of the sea, for much of the distance known as the Halifax River. This is the home of billions of oysters on which the aborigines fed from time immemorial, as is evidenced by the great heaps of shells along the banks. Some of the heaps are miniature hills. Such mounds are distributed very evenly along the greater length of the eastern seaboard. Two important towns beside the Halifax River are Ormond and Daytona, and just south of Mosquito Inlet is New Smyrna, the oldest settlement on the Atlantic coast south of St. Augustine.

Not far below New Smyrna is the north end of the Indian River, and the distance to its other end at Jupiter Inlet is one hundred and forty miles. The most interesting fact about this river is that it is not a river at all, but a salt water sound, superlatively safe, placid, and beautiful. It varies in width from scarcely a hundred feet at the Narrows to eight miles, and is so straight that when one looks along it north or south water and sky seem to meet. The soil of the mainland which borders this "streak of silver sea" is unsurpassed for the cultivation of citrus fruits and pineapples. The pineapples hide the earth on the ridge next to the river for

miles and miles with their prickly green leaves. Much of the country back of the narrow fertile belt is wilderness haunted by bears, panthers, wild cats, and deer, and by wild turkeys and the lesser varieties of wild fowl. One proof offered of the winter blandness of the Indian River region is that its frequenters, male and female, sometimes bathe the old year out and the new year in. Most of the time there is a gentle breeze coming inland from the warm waters of the Gulf Stream.

The next slender coast lagoon is Lake Worth, twenty-two miles long, and on the peninsula that lies eastward is the world-famed Palm Beach, the "millionaires' playground." Here is the largest hotel for tourists in existence, six stories high, and nearly a fifth of a mile long, with accommodations for two thousand people. Palm Beach is a gem in a jungle, for wilderness merging into the Everglades begins to the westward almost with the lake shore.

The chief place farther south is the "Magic City," Miami, which consisted only of a store and several houses in 1895. On one of the beaches about a dozen miles down the coast is a bed of "singing sand" that emits a musical sound under foot.

From the southern end of Florida a line of islands extends in a gentle curve for two hundred miles to Key West and beyond. These islands, or keys as they are called, are of coral. Fully fifty of them are inhabited and productive. The largest is thirty miles long. The journey from Miami to Key West is by the world's

A Sponge Boat, Key West

first sea-going railway, one hundred and fifty miles long, which cost upward of $100,000 a mile. Fully half the track is over the water. One viaduct is seven miles long. The first through train reached Key West in January, 1912, and went on by the huge car ferry that conveys trains direct to the Cuban capital, ninety miles distant. Key West is eight hundred and fifty miles nearer the equator than Los Angeles, and one hundred miles nearer the equator than the southernmost part of Texas. The city is on a small island of the same name, commanding the entrance to the Gulf of Mexico, and has been called "America's Gibraltar." The words Key West are a crude English pronunciation of the Spanish name for the island—*Cayo Hueso*. This name means Bone Island. According to tradition, the native tribes inhabiting the keys were gradually driven from one island to another by a more powerful mainland tribe until they were nearly exterminated in a final battle on Key West. The abundance of human bones found on the island when it was first discovered suggested its name. The city is an important port for sponge fishermen, and the one hundred and fifty little sailing vessels of the sponge fleet are constantly going and coming. South of Key West is Sand Key, a small island, which is nearer the tropics than

Loggerhead Key, Dry Tortugas

any other point in the United States. A lighthouse is located on it. Farther west are two groups of islands, the more remote of which is the Dry Tortugas, seventy miles from Key West. Tortugas is Spanish for turtles, and the name refers to the abundance of these creatures and the dearth of fresh water there.

A Drink from the Suwannee River

The next person after Ponce de Leon to undertake the exploration of Florida was Panfilo de Narvaez, who arrived with four hundred men on the southwest coast in April, 1529, commissioned by the king of Spain to conquer and govern a province. A part of his force sailed northward in the vessels, but he and the larger part made their way in that direction on the land, fighting Indians and nearly starving. At length they arrived at the Bay of St. Marks. Where their vessels were they did not know, and after continuing westward to Choctawhatchee Bay they built boats in which they

Lake Parker, near Lakeland

purposed to keep along the coast to Mexico. But the boats were wrecked, and they suffered much from the Indians, and from disease and famine. They even lived for a time on the bodies of those who died. Only five got back to civilization.

The oldest place in the northwest section of the state is Pensacola, begun by the Spaniards in 1696, destroyed by the French in 1719, and rebuilt by the Spaniards three years later. "Old Hickory" marched on and captured the place in 1812, because the harbor was made a rendezvous for a British fleet, and the town a base of supplies for hostile Indians. He captured it in 1818 again for similar reasons. The harbor is said to be the finest one on the Gulf, and Pensacola has developed into a stirring modern city.

Picking Oranges

After Florida passed into American hands Tallahassee was picked out for the seat of government, because of the general beauty of the situation, and the noble growths of live oaks and magnolias there. It occupies seven hills, and is sometimes called the "Hill City." Another name it has acquired is the "City of Flowers." Everywhere are gardens, and the people are rivals in their ambition to surpass each other in the floral adorning of their home surroundings. Prince Murat, oldest son of the famous

marshal of France whom Napoleon made King of Naples, was a former resident of Tallahassee, and there you can see his home. The mocking-birds are reputed to be more numerous in this vicinity than in any other part of the South. Fifteen miles down toward the Gulf is a wonderful spring, the Wakulla, which sends off a full-grown river of the same name from its single outburst. The entire region is full of remarkable springs, caves, sinks, and natural bridges. Southeast of Tallahassee extends a vast belt of woods merging into an almost impenetrable swamp and tangle of undergrowth. This is a famous hunting-ground, and somewhere in the watery jungle is the "Wakulla Volcano," whence rises a column of smoke or vapor from a spot so far within the swamp that no one has been able to get to it. In the northern central part of the state is the Suwannee River, immortalized in that best loved of all plantation songs, "The Old Folks at Home."

A Seminole in the Everglades

There are at least 30,000 lakes in Florida. They are particularly numerous in the central part, which for this reason has been called the "Lake District." In Lake County alone are 1400 lakes large enough to have names. Lake Okechobee is the largest fresh-water lake within the limits of the United States, except Lake Michigan. Florida is the greatest producer of phosphate of any region in the world. Lakeland is the state's chief center of this industry.

From the Central Lake Region come more oranges and grapefruit than from any other section of Florida. The orange-picking season continues from November to April. As many as 10,000 oranges have been picked from a single tree in a season.

Among the attractive places on the west coast is Tarpon Springs, the "Venice of the South." It is famous as a winter resort and for being the port of the largest sponge fisheries in the world. The important commercial city of Tampa is near where Fort Brooke was established in 1821. The site of the fort, the old barracks of which are still standing, is now a public park. Within the park limits are the remains of several aboriginal mounds. On the tip of the peninsula which separates Tampa Bay from the Gulf of Mexico is St. Petersburg, the "Sunshine City," where is published a newspaper which has gained great notoriety by offering free its entire edition on every day that the sun fails to shine. The sunless days do not average more than half a dozen in a year. The neighboring waters teem with fish, the most noteworthy of which are the tarpon, or "Silver King," the finest game fish in the sea. Adult tarpon often exceed six feet in length and may weigh over two hundred pounds. Charlotte Harbor is also a favorite resort for tarpon fishing. Down on the Caloosahatchee River is Fort Myers, nestling in the shade

In the Big Cypress

of its cocoa palms. This is the outfitting point for cruises farther south into the bird-haunted labyrinths of the Ten Thousand Islands.

From Fort Myers, too, you can go by boat up the river and through a canal to Lake Okechobee, and then by another canal on across the Everglades to West Palm Beach. The canals are a recent innovation, and have for their chief purpose the draining of the land and fitting the rich soil for cultivation. The Everglades occupy a shallow basin one hundred and thirty miles north and south and seventy east and west, which makes a total area much the same as the state of Connecticut. It is not exactly land and not exactly water. There is too much water to travel by land, and too much rank saw-edged grass to journey freely by water. The only relief to its level prairie-like monotony is a dotting of islets heavy with tropical growths, and usually plumed with one or two palmettos. The water is nowhere stagnant or wholly at rest, and is clear, limpid, and palatable. Not until 1883 did any organized expedition cross the Everglades. Here dwell about three hundred Seminoles, who are some of the most picturesque Indians in the United States. They are a remnant of the large tribe against which the government waged war from 1835 to 1842 at a cost of 1500 lives and $20,000,000. Osceola was one of their leaders, and Coacoochee, or "Wildcat," another. Early in the war the Indians surprised one hundred and ten United States Regulars near the Wahoo Swamp on their way from Fort Brooke to Fort King, now Ocala, and killed all but two. On Christmas Day, 1837, a general engagement was fought on the northern shore of Lake Okechobee. The outcome of the war was the deportation of most of the tribe to Western reservations.

Floridians are popularly called "Fly-up-the-creeks," a name borne by some of the small herons of the state.

© Detroit Pub. Co.

A Street in Mobile

XX

Alabama

In 1702 the French established themselves on the shores of Mobile Bay, but things did not go smoothly. There was a curious revolt known as the "Petticoat Insurrection" when the women of the place became dissatisfied with Indian corn as their staple article of food, and threatened rebellion. A hurricane and flood which nearly destroyed the settlement in 1711 caused the people to remove to the site of the present city, the oldest settlement in Alabama. For the next nine years Mobile was the seat of government of the vast Louisiana territory. The best known episode in its history is Rear-admiral Farragut's forcing his way into the Bay in the Civil War. The main entrance, which is about thirty miles below the city, was guarded on either side

by a fort, and the channels between the forts were filled with obstructions and torpedoes, while within the bay were three Confederate gunboats and a powerful ironclad ram. Farragut's fleet of fourteen wooden steamers, lashed together in pairs, and four monitors, started early on the morning of August 5, 1864. He himself gave orders from the shrouds of his flagship, where he was tied lest he should fall into the sea or on to the deck, if he should be shot. One monitor was soon destroyed by a torpedo, but the rest of the vessels pushed on past the forts and captured or destroyed all the enemy fleet except one gunboat. The forts surrendered soon afterward. Mobile, however, held out till April of the next year. Some of the old intrenchments about it can still be seen. The modern town has a good deal of charm with its broad, quiet residence streets shaded by magnolias and live oaks, and its gardens, which in spring are fragrant with orange blossoms and jasmine.

The Indians long continued to be a menace in Alabama, and prevented settlers from pushing inland. It suffered most from them in 1813. At that time, on the east bank of the Alabama River, near where it joins the Tombigbee forty miles north of Mobile, was Fort Mims, consisting of a stockade surrounding a blockhouse and some other buildings. The fort bore the name of the farmer who owned the premises. To it the settlers had flocked for protection. At eleven o'clock, one August morning, preparations were being made to whip a negro, who had been out attending the cattle, for making what was believed to be a false report that Indians were prowling near. Suddenly a thousand Creek warriors made a rush on the defenses. The stockade gate was open, and many of the Indians got inside, but the resistance was stubborn, and the battle lasted till late in the day. Nearly all the five hundred men, women, and children in the fort were killed, and fully as great a loss was inflicted

on the savages. Tennessee sent 3500 men under Gen. Jackson to deal with the Creeks, and he rendered them almost helpless by a bloody defeat at Talladega, and another, forty miles to the southeast, at the Horseshoe Bend of the Tallapoosa River, where they had taken refuge behind breastworks erected across the neck of the bend.

The capital of the state is Montgomery, the "Cradle of the Confederacy." Its first white settler built a cabin there in 1815. A few other settlers straggled into the vicinity in the next few years, and the brow of the commanding height now occupied by the State House was adorned with goat-sheds and was called Goat Hill. Three tiny hamlets developed — New Philadelphia, Alabama Town, and East Alabama Town — but these united in 1819 under the name Montgomery. This became the capital in 1847 after several other places had served in that capacity. The archives were brought from Tuscaloosa, a hundred miles northwest, in one hundred and thirteen cases loaded on thirteen wagons. It was at Montgomery that delegates from all the seceding states met in February, 1861, and organized the Confederate government. On the 18th of the month, amid unbounded enthusiasm, Jefferson Davis, standing in the front portico of the Capitol, was inaugurated as president. Near the State House is an old slave market with all its details intact.

State House, Montgomery

Forty miles east of Montgomery is the typical old southern town of Tuskegee where Booker Washington founded his famous Normal and Industrial School for negroes in 1881. It is in what is known as the Black Belt of the South.

Front of Courthouse at Tuskegee

Originally the term "Black Belt" referred to the soil, which in this section is dark and naturally rich. Slaves were most profitable on such land and were taken there in the largest numbers. Latterly the words have come to designate the region where the black people outnumber the whites. In some of the counties the proportion runs five or six to one. Mr. Washington began his task with thirty students in a rather dilapidated shanty, and a near-by colored Methodist church, which was not much better. During the earlier months that he taught in the shanty it was in such poor repair that, when there was rain, one of the students would hold an umbrella over him while he heard the recitations of the others. Also, on more than one occasion, his landlady held an umbrella over him while he ate breakfast. But as time went on the school developed into the largest, most useful educational institution for colored youth in the world, and Mr. Washington was universally recognized as one of the sanest and most eloquent leaders his race has produced.

The state's name is of Indian derivation and means "Here we rest." The nickname for the people is "Lizards." These creatures are numerous there, and the way the poorer people used to live along woodland streams was suggestive of

lizards. The "Cotton State," as Alabama is called, indicates its leading industry. But the production of iron is also of great importance, and Birmingham is known as the "Pittsburg of the South." The city is located on an old cotton plantation. In 1880 it had a population of 3000. Now it has over 130,000, and is the state's largest city. It claims to be the best-lighted city in the world. Birmingham owes its phenomenal growth to Red Mountain, near by, which contains inexhaustible stores of iron ore in conjunction with abundant coal and limestone.

Sixty miles directly east of Birmingham is Cheaha Mountain, the state's loftiest height, with an elevation of 2407 feet.

An Old Tavern Beside Wolf Creek

XXI

Tennessee

Tennessee's first permanent settlement was made in 1769 by fourteen families that came across the mountains from North Carolina. The men, who led the way, often had to clear a road with their axes for the mixed procession of women, children, dogs, cows, and pack horses. They settled on the banks of the Watauga where it is joined by Boones Creek in the northeast corner of the state.

In 1784 the people of eastern Tennessee formed the independent state of Franklin, but this only survived three years. It was in this short-lived commonwealth that the famous frontiersman, Davy Crockett, was born in 1786 near the present town of Rogersville. He had five brothers and three sisters. The log cabin of the family stood where Limestone Creek joins the Nolichucky River. Davy's

father cleared land on which to raise crops, but depended mainly on hunting and trapping for a living.

A Frenchman settled near the site of Nashville in 1775, and three years later a Kentucky hunter passed the winter in the vicinity, utilizing a great hollow sycamore for shelter. Close by was the Cumberland River. A neighboring salt spring made it a noted resort of Indians and buffaloes. Some years ago the huge bones of a mastodon were exhumed from the alluvial deposit on the margin of the spring. Near by was a cemetery of rude stone graves of the long-vanished mound building race. On Christmas Day, 1779, more than two hundred hardy pioneers from eastern Tennessee arrived at the salt spring. Late in the same month their families started to join them in "the good boat *Adventure*," which carried a sail, and in other boats and canoes. They came down the Holston and Tennessee rivers, and up the Ohio and Cumberland, a winding journey of over a thousand miles, and arrived April 24, a good deal depleted by hostile Indians, accidents, and disease. One of the voyagers was Rachel Donelson, who afterward became mistress of the White House as the wife of President Jackson. Cabins and a fort were built on the commanding bluff north of the river, and for the time being the settlement was the advance guard of western civilization. One day the savages made a surprise attack, and forced their way almost to the gates of the fort located near the present corner of Market and Church streets. At an opportune moment a

State House, Nashville

pack of powerful watch-dogs and hounds was turned loose. With their help the "Battle of the Bluffs" was won, and the fort and settlement were saved.

Falls of Rock Creek

Nashville became the capital in 1843. It was captured by a Union army in February, 1862, after desperate fighting. Thomas, Sherman, and Grant all held command there at different times. The Southern soldiers who fell in the battles around the city are buried in the beautiful grounds of the Confederate Circle at Mt. Olivet, while the Federal dead sleep peacefully in the National Cemetery not far away. Within the city limits are fully eighty schools and colleges, including the famous Fisk University for the education of negro teachers, which was founded in 1867, and which its Jubilee Singers sang into success. The stately residence of James K. Polk, eleventh President of the United States, still stands in the center of the city. Twelve miles east is the Hermitage, the hospitable mansion of President Andrew Jackson. In a corner of its garden he and his wife are buried beneath a handsome marble tomb.

Memphis, the chief city of Tennessee, and the largest on

the Mississippi River between St. Louis and New Orleans, is situated on a bluff which rises sixty feet above the highest floods. Here De Soto discovered the great river in 1541, after wandering for two years through the American wilderness from Florida; here La Salle built a fort in 1682, which was later abandoned; and here the Spaniards established themselves for a time. When the town was organized in 1819 there were a few straggling shanties clustered around a primitive warehouse near the river. At the beginning of the Civil War it had a population of 23,000, and the claim is made that no other city furnished so large a proportion of men to the Confederate armies. In 1862 a fleet of Union gunboats came down the river and defeated the Confederate fleet before the city, while the populace lined the bank and looked on. Memphis then surrendered and never again was under Confederate control except for a few hours, two years later, when the brilliant cavalry leader, Gen. Forrest, made a raid into the place. At Memphis is the only bridge across the Mississippi south of St. Louis.

© Detroit Pub. Co.

Mississippi River Steamboats, Memphis

Nearly the whole state was a battleground during the Civil War. Fort Henry on the Tennessee River near the Kentucky border was captured by Gen. Grant early in February, 1862, and within a week he was besieging the

much stronger Fort Donelson, twelve miles east, overlooking the Cumberland River from a bluff one hundred feet high. After a siege of only five days the fort surrendered. The next month was fought the great Battle of Shiloh at Pittsburg Landing, an obscure stopping place for boats on the Tennessee River a little north of the Mississippi boundary. After a day of disaster Grant's army was driven back to the river in nearly utter rout, with a loss of about one fifth in prisoners. That night Gen. Buell arrived with 20,000 men, after a forced march of twenty-five miles, one of the finest feats in American military history, and what had promised to be an overwhelming victory for the Confederates was turned into a disastrous defeat.

A Negro Cotton Farmer's Home

Pittsburg Landing, Shiloh Battlefield

There was much fighting farther east in the neighborhood of that important strategic point, Chattanooga. Lookout

Ledges of Lookout Mountain

Mountain, over 2000 feet high, rises south of the city and commands a view into seven states. This mountain was the scene of the "Battle above the Clouds," November 24, 1863. A few miles away is Missionary Ridge, where was fought, only a day later, one of the bloodiest encounters of the war. Out of 121,000 men engaged, 35,000 were killed or wounded.

Knoxville is the chief city of eastern Tennessee. Thirteen miles to the southwest is Lowes Ferry, where Admiral Farragut was born in 1801. At the outbreak of the Civil War every effort was made by his fellow Southrons to induce him to join the Secession forces, but he refused, saying, "Mind what I tell you — you fellows will catch the devil before you get through with this business."

Thunderbolt, one of the finest heights in the Great Smoky Mountains, can be conveniently visited from Knoxville. Near the mountain is a reservation containing about 1800 Cherokee Indians. Tennessee's highest peak is Mt. Guyot, about midway on the eastern boundary, with an elevation of 6636 feet.

The state bears an Indian name which means River with the Great Bend. Its popular name is the "Volunteer State." This was acquired during the War of 1812, because of the large number of Tennessee volunteers. The people are called "Butternuts" from the color of clothes worn by the state troops in the Civil War.

A Blue Grass Mansion near Lexington

XXII

Kentucky

The most famous of Kentucky pioneers was Daniel Boone. He made his first journey into the region from North Carolina in May, 1769, and remained for two years. Once, during that time, the Indians captured him, but a week later he escaped while his captors lay sleeping around a camp fire in a canebreak. One of his companions was slain by the savages, and another was attacked and killed by wolves. He saw hundreds of buffalo in a drove, and the numbers around the salt springs were amazing.

In 1774 a settlement was made at Harrodsburg, about thirty miles south of Frankfort, and the next year Boone guided a party through the wilderness to the Kentucky River, eighteen miles southeast of Lexington, where they started the settlement of Boonesboro by building a fort near a salt lick. The name adopted by the early comers for what is now Kentucky was the "Colony of Transylvania," and so it was known for several years. Boone helped to

conquer an empire, but he was a picturesque adventurer rather than a successful leader. In his old age he stated that he "had no spot he could call his own, whereon to lay his bones," and he died landless. At least thirty places in the United States have been named after him. He is buried at Frankfort, the capital, in a cemetery on one of the suburban hills.

The name of the state is of Indian derivation, and means "the dark and bloody ground." This alludes to the contests between the aboriginal tribes who made it their common hunting place, yet dwelt outside of its bounds. The people are nicknamed "Corn-crackers." The word is a corruption of corn-crake, which is a species of game bird common in the state, and is so called from its peculiar cry, and its habit of frequenting corn fields.

All the surface of Kentucky, except the mountainous eastern part, abounds in mounds, ditched and walled fortifications, and other evidences of a considerable ancient population more given to agriculture than our ordinary Indians. These people were, however, of the same race. Their only peculiarity was that in the period of their mound-building and agricultural activity the buffalo was as yet unknown in those parts. As long as this abundant resource of the chase was unavailable, a chief incentive to a wild life was lacking.

Louisville, the metropolis of the state, is an important gateway to the Southwest. It was founded in 1778 by George Rogers Clark, the noted Indian fighter and frontier leader. He built a fort on an island which is near the Kentucky shore somewhat down the Ohio from the 14th Street bridge, and there thirteen families established themselves. Within a few months the garrison started a settlement on the neighboring shore. On several occasions the Indians surprised and captured parties beyond the protection of the fort. This led Col. Clark to improve the defense of the

© *Detroit Pub. Co.*

HIGHBRIDGE, KENTUCKY RIVER

settlement by constructing a rude gunboat armed with four cannon. The effectiveness of this war-craft may have been open to question, but it at least kept the savages from crossing the river in its vicinity. The naturalist, Audubon, came to Louisville in 1809, and stayed there while he collected specimens of every bird that could be found in forest or field. In March, 1890, a terrific tornado swept through the heart of the city, leveling almost everything that stood in its way in a path seven hundred feet wide. The property loss was $3,000,000, and seventy-six persons were killed. Kentucky raises more tobacco than any other state, and Louisville is the greatest tobacco market in the world.

Five miles east of Louisville is the old home and burial-place of President Zachary Taylor.

Kentucky is known as the

LOOKING OVER FISHNETS AT THE MOUTH OF THE OHIO

"Blue Grass State." Blue grass is not peculiar to Kentucky, but on the best limestone lands of that state it attains remarkable luxuriance. It is called "blue" grass on account of the color of its seed vessels, a conspicuous feature during its time of fruiting. The blue grass pastures make ideal grazing for live stock. The chief town of the Blue Grass Country is Lexington, which received its name from having been founded in the year of the Battle of Lexington. Among the famous stock farms near it is Ashland, formerly the home of Henry Clay. At Woburn, fifteen miles from the city, that famous trotter, Maud S, was bred, and seven miles north of the city is Poplar Hill, the birthplace of Nancy Hanks, who trotted a mile in 2.4. About forty miles south from Lexington, on the edge of the Cumberland Mountains, is Berea College, which is doing such excellent work among the Mountain Whites. It was organized in 1855 for the education of both whites and negroes. Its founder was a clergyman who was a son of a slaveholder, but a zealous opponent of slavery. For this opposition his father and his church disowned him. The college was suppressed after the John Brown affair, and its officers were driven from the state, but it was revived after the war.

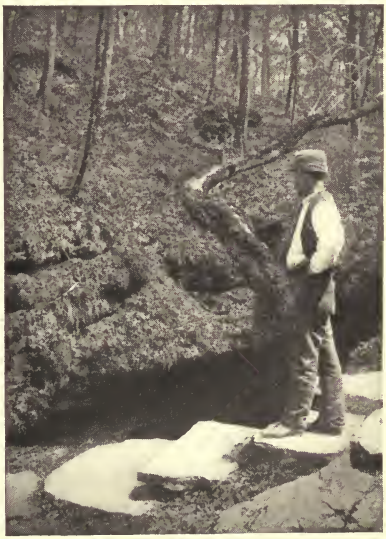
A Road near Lincoln's Birthplace

Kentucky has many salty swamps called "licks," which the deer and elk and buffalo fre-

quented in pioneer days. The largest of these swamp-bordered springs is the Big Bone Lick, about twenty miles southwest of Covington in the most northerly nook of the state. The mire there contains a wonderful mass of the bones of the elephant, mastodon, musk-ox, and other creatures which are now extinct or which a change of climate long ago forced to leave this section.

At Gethsemane, nearly half a hundred miles southeast of Louisville, is the only Trappist monastery in the United States. Somewhat to the west is Elizabethtown where, in 1806, Thomas Lincoln married Nancy Hanks. The next year a daughter was born to them, and they moved about a dozen miles to a little farm near Hodgenville. Here was born Abraham Lincoln, February 12, 1809, and here he lived in a log cabin until he was seven, when the family migrated to Indiana. A costly temple-like structure has been built where the home stood, and in it is sheltered what is alleged to be the log cabin in which the martyred president was born.

Jefferson Davis was also born in Kentucky, and only eight months earlier, and barely a hundred miles away to the southwest in what is now Todd County. He was the youngest of nine children. His parents were of the middle class, the owners of a few slaves, and yet doing much of their own work. They soon moved to Mississippi.



Entrance to the Mammoth Cave

In the southern central part of the state is the Mammoth Cave, the largest known cavern in the world. The various avenues which have been explored have a total length of two hundred miles. It is in five distinct tiers. Among its features are Fat Man's Misery, Dead Sea, Echo River, the Maelstrom, the Corkscrew, Giant's Coffin, Bottomless Pit, and Star Chamber. Several of the chambers are from two hundred to three hundred feet high. The cavern has its eyeless fish and a prolific population of bats. It was discovered in 1809 by a hunter, who entered it to secure a wounded bear which had found shelter there. The funnel-shaped opening is in a rocky forest ravine. The temperature in the cave is maintained at from fifty-two to fifty-six degrees the year round. In summer the relatively cool air flows out, and in winter the colder air outside is drawn in. This air movement is known as "the breath of the cave." A great section of the state has limestone near enough to the surface to allow streams to excavate it. Without doubt there are 100,000 miles of ways large enough to permit the easy passage of a man.

On the rugged southeastern border of the state is Big Black Mountain, 4100 feet high, the loftiest height in Kentucky. The state has a greater frontage on navigable rivers than any other state in the Union.

Scale of Miles
0 25 50 100 150 200 250 300
Rainy Lake
Port Arthur
ISLE ROYAL
Ely
LAKE SUPERIOR
Two Harbors
Calumet
Eagle River
Houghton
Duluth
Ishpeming
Marquette
Superior
Bessemer
Negaunee
Sault Ste Marie
Ashland
Ironwood
Manistique
Straits of Mackinac
MACKINAC
Iron Mountain
Escanaba
Cheboygan
Rhinelander
Menominee
Petoskey
Alpena
Stillwater
Chippewa Falls
Marinette
Green Bay
LAKE HURON
St. Paul
Eau Claire
Wausau
Sturgeon Bay
Traverse City
WISCONSIN
Neenah
Appleton
Manitowoc
Cadillac
Manistee
L. Winnebago
Oshkosh
Ludington
Winona
La Crosse
Portage
Big Rapids
Saginaw
Bay City
Austin
Fond du Lac
Sheboygan
Port Huron
Hamilton
Baraboo
Beaverdam
Muskegon
Ionia
Flint
Watertown
Milwaukee
Grand Rapids
Owosso
London
Madison
Racine
Lansing
Waterloo
Waukesha
Holland
Detroit
Monroe
Beloit
Kenosha
Battle Creek
Dubuque
Freeport
Rockford
Kalamazoo
Jackson
Ann Arbor
Cedar Rapids
Elgin
Evanston
St. Joseph
Adrian
Clinton
Aurora
Coldwater
Davenport
Dixon
Elkhart
Toledo
Ashtabula
CHICAGO
Michigan City
Sandusky
Cleveland
Muscatine
Ottawa
Joliet
Hammond
South Bend
Tiffin
Lorain
Youngstown
Rock Island
Valparaiso
Akron
Burlington
La Salle
Fort Wayne
Findlay
Canton
Galesburg
Kankakee
Mansfield
East Liverpool
Fort Madison
Logansport
Peru
Marion
Steubenville
Peoria
Bloomington
Lima
Marion
Carlton
Kokomo
Bellaire
Keokuk
Macomb
Pekin
Lafayette
Elwood
Muncie
Piqua
Newark
Kirksville
ILLINOIS
Danville
Zanesville
Beardstown
Richmond
Springfield
Columbus
Quincy
Decatur
INDIANA
Marietta
Springfield
Jacksonville
Indianapolis
Dayton
Hannibal
Litchfield
Pana
Terre Haute
Shelbyville
Hamilton
Chillicothe
Mexico
Mattoon
Greensburg
Cincinnati
Columbia
Alton
Bedford
Covington
Newport
St. Charles
E. St. Louis
Vincennes
Seymour
Portsmouth
Ironton
Belleville
Madison
Maysville
St. Louis
Mt. Carmel
Centralia
Jeffersonville
FRANKFORT
De Soto
Mt. Vernon
Carmi
Evansville
Louisville
Lexington
Bonne Terre
Murphysboro
Lebanon
Cape Girardeau
Cairo
KENTUCKY
West Plains
Charleston
Poplar Bluff
Carruthersville
TENNESSEE
Nashville
Knoxville
Rock R.
Illinois R.
Kaskaskia R.
Wabash R.
Ohio R.
Green R.
Tennessee R.
Cumberland R.
Mammoth Cave
CUMBERLAND MTS.
Big Sandy R.
Great Kanawha R.
White R.

A Canal at Hamilton

XXIII

Ohio

A Moravian missionary built a cabin on the Tuscarawas River in 1761, and this was the first white man's house in the limits of the future Ohio. It was in the central eastern part of the state near New Philadelphia. Ohio's first church was built in 1772 at a Moravian mission village in this same vicinity. Two other villages of Indian converts were established not far away, but in September, 1781, unfriendly natives made the three villages a scene of general robbery and violence. The villagers all left, but ninety-six of the Indian men and women converts returned in February to save the corn left standing in their fields. Before they could get away with the corn ninety men from the Ohio appeared, secured the Indians' guns, hatchets, and knives, shut the people up in two houses at the village of Gnadenhütten, and slaughtered all of them like sheep. A missionary came back

in 1798, gathered up the relics of the ninety-six victims, buried them in the cellar hole of one of the houses, and raised a mound over the spot.

In April, 1788, Marietta was founded where the Muskingum joins the Ohio. A straggling and sparse fringe of frontiersmen already occupied the Ohio's west bank, but Marietta was the state's earliest organized settlement. The founders were forty-eight men from Massachusetts, most of whom had seen service in the Revolutionary War. They had journeyed overland with their wagons along an old Indian trail through Connecticut and Pennsylvania, and in the western part of the latter state built boats on the banks of the Youghiogheny and finished their journey by water. A fortification consisting of blockhouses and a double palisade was erected, and the name Campus Martius was bestowed on it. The 4th of July was celebrated by a procession of citizens and soldiery, an oration, and a great "banquet" eaten in a bowery set up on the banks of the Muskingum. There were barbecued venison, buffalo steaks, bear meat, roasted pigs, and a pike six feet long.

The families of the pioneers arrived in August. The next month the Court of Common Pleas of the Territory was opened, and the sheriff, Col. Ebenezer Sproat, preceded by a military escort, marched with his drawn sword and wand of office ahead of the governor, judges, and others to the blockhouse where the court was held. Friendly Indians looking on were so impressed by the mighty form of Col. Sproat, who was six feet four inches tall, that they ever after called him "Big Buckeye." This led to calling all Ohio natives "buckeyes," and Ohio itself the "Buckeye State." The name is that of a tree of the horse-chestnut family, which, in Ohio, at least, is conspicuous for its height and symmetry.

The most interesting building of the early period that has survived in Marietta is the "Two Horn Church" of the

Congregationalists, a big double-towered wooden structure erected in 1806. This is Ohio's oldest house of worship. In what is known as the "Old Mound Cemetery" is a prehistoric mound which remains just as it was found by the pioneer fathers. Round about are the graves of most of the early settlers, and it is claimed that here are buried more officers of the Revolution than in any other cemetery in the United States.

The mound mentioned is one of about 10,000, large and small, scattered over Ohio. In no other state have the Mound Builders left so many remarkable works. Especially noteworthy are those at Fort Ancient in the Little Miami Valley, and Circleville and Chillicothe in the Scioto Valley. Some are of huge proportions. In the southern part of the state beside Brush Creek, seven miles from the railway station of Peebles, is the famous "Great Serpent." Across the widely opened jaws it measures seventy-five feet, and just behind the head thirty feet. It is five feet high, and, following the curves, 1348 feet long. The tail is a triple coil. Between the distended jaws is an oval inclosure one hundred and nine feet in length and thirty-nine broad with a heap of stones at its center. The purposes the mounds served were various. Some were used for sepulchres, some for altars or religious rites, others probably for residences, and many served such purposes as advanced posts or signal stations in con-

A Cincinnati Bridge

nection with fortifications. The tree growths on them indicate that they must all have been in use less than a thousand years ago, and no doubt our Indians are the mound builders' descendants.

© Detroit Pub. Co.

Rocky River, Cleveland

Cincinnati was founded in 1778. On the day before Christmas twenty-six well-armed men in deerskin hunting shirts and leggings embarked in rude barges of their own construction on the Ohio River at what is now Maysville, Kentucky. They steered their course down the swollen and half-frozen stream, and at the end of four days found a haven on the north side in Sycamore Inlet, opposite the mouth of the Licking River. There they converted the planks and timbers of their barges into cabins right on the trail over which the aborigines had passed to and fro for centuries between the Great Lakes and the Kentucky hunting grounds. A fantastic schoolmaster, who combined a smattering knowledge of classic languages with a lively imagination, compounded the name Losantiville for the new settlement. It means "The village opposite the mouth of the Licking." L stands for Licking, os means mouth, and anti means opposite. Shortly after naming the place the schoolmaster was scalped by the Indians. The name seems to have required too much explanation, and was presently changed to Cincinnati. The city's nearness to the slave states, and its close social and commercial relations with the South, led its people to oppose antislavery laws and even the discussion

STATE HOUSE, COLUMBUS

of slavery. Nevertheless, the city was a rendezvous for fugitive slaves escaping to Canada, and no less than 3000 in all were harbored and helped on their way by Levi Coffin, a Quaker citizen. The place has developed into a city of homes and churches. It is America's leading city in the production of schoolbooks, is near the lead in issuing religious publications, and it turns out annually some 50,000,000 packs of playing cards, which makes it the largest center of this industry in the world. The city has a frontage of fourteen miles on the Ohio, and has spanned the river with five massive bridges of steel and stone.

In November, 1791, the Battle of the Wabash was fought with the Indians on the western border of the state near the present town of Greenville. An army of 1500 whites was attacked by Turkey Foot and his savage followers in the drifting fog of dawning day, and stampeded like a herd of crazed cattle. Nine hundred were killed or wounded. During the next two years the Indians were left free to make their murderous assaults on the long frontiers. Then, in August, troops led by "Mad Anthony Wayne" encountered Turkey Foot's band in a two-mile strip of débris left by a cyclone, thirteen miles up the Maumee River from Toledo.

The Battle of Fallen Timber was a decisive victory for the whites. Nearly half a hundred mighty chiefs were slain, and the Indians christened their conqueror "Big Thunder."

The final fighting with Indians in Ohio occurred near Chillicothe on Paint Creek in 1793. That same year the last buffalo known to have been killed in Ohio was shot on the Hocking River in the southeastern part of the state.

The Ohio River forms all of the state's southern boundary and half of the eastern boundary. The Indian name for it was Ouabouskigou, which means Beautiful River, and from which the word Ohio was derived. The channel it has worn is amazingly deep. Often the river is more than five hundred feet below the summits of the gentle hills along its valley. The average stage of water at Cincinnati is eighteen feet, but in floods it has gone over seventy feet. The first steamboat on the stream was the *Orleans*, which was launched at Pittsburg in September, 1911, and started on a voyage down the river. Few of the dwellers on the banks had even heard of steamboats, and it excited wonder and terror among them. Some fancied that a comet, which at the time was visible in the night sky, had fallen into the river. The boat received ovations at Cincinnati and Louisville.

Cleveland, the largest city in the state, and called the "Forest City" on account of its abundant trees, was founded in 1796, but long continued to be only a rustic hamlet.

Sixty miles west of Cleveland is Sandusky, near which are the famous peach orchards of Catawba Island. A little way out in the lake is South Bass Island, a summer resort of a good deal of charm near which Commodore Perry won his great naval victory in September, 1813.

The capital of the state since 1816 has been Columbus. When its site was selected the spot was a dense forest.

In March, 1913, Ohio, Indiana, and Illinois were visited by a rainstorm of which the United States Weather Bureau

said: "There have been heavier storms in restricted localities, but such a heavy precipitation extending over three or four days in such a large area is unprecedented." The rivers rose rapidly and broadened out over a far greater amount of land than had been flooded before since the white men came to the region. Hundreds of lives were lost. The place that suffered most was Dayton, a city of 100,000 inhabitants, at the confluence of the Mad River with the Great Miami. Torrents of muddy water raged through the streets, and the estimated loss in that county alone was $150,000,000.

Looking out of Put-in-bay toward the Scene of Perry's Victory on Lake Erie

Ohio ranks next to Virginia as a mother of Presidents. Half of those who have occupied the White House since Lincoln's death have been Ohio born. Gen. Grant was born beside the Ohio in 1822 at Point Pleasant, thirty miles southeast of Cincinnati. Hayes was born the same year at Delaware, twenty-five miles north of Columbus. Garfield was born in 1831 in Orange Township, fifteen miles east of Cleveland. Benjamin Harrison was born in 1833 at North Bend, ten miles west of Cincinnati. McKinley was born in 1843 at Niles, fifty miles southeast of Cleveland. Taft was born in 1857 in Cincinnati.

Among other famous Ohioans are Gen. Sherman, born in

1820 at Lancaster, thirty miles southeast of Columbus; Thomas A. Edison, born in 1847 at Milan, a dozen miles south of Sandusky; and W. D. Howells, born in 1837, at Martins Ferry just across the Ohio from the West Virginia city of Wheeling. Much of Mr. Howells' boyhood was spent in Hamilton, twenty miles north of Cincinnati, and his experiences there are embodied in his delightful "A Boy's Town." Another Ohio writer whose novels bid fair to have a permanent place in our literature is Mrs. Mary S. Watts, born in Delaware County in 1868 and now a resident of Cincinnati.

Ohio entirely lacks mountains. Its highest point, 1550 feet, is near Bellefontaine, fifty miles northwest of Columbus.

A Glimpse of the Tippecanoe

XXIV

Indiana

It is surmised that where Indiana's oldest town, Vincennes, now stands beside the Wabash on the southwestern border of the state the ancient race of Mound Builders had their capital city. In the immediate vicinity are several large mounds and hundreds of smaller ones. When a few French families came thither and settled about 1730 they found there an important Indian town called Chip-kaw-hay, a name soon changed to Vincennes. After the place fell into English hands along with the other French possessions in America, a small stockade defense known as Fort Sackville was erected there. In 1779 the pioneer leader, George Rogers Clark, who had recently captured Kaskaskia on the southwestern border of Illinois, set out with one hundred and seventy men to march nearly two hundred miles across country against Vincennes. A few pack horses were laden with what

provisions and ammunition the men could not carry on their backs. There was much rain so that a great deal of the land was overflowed, and a thin coating of ice formed on the water each morning. The men had no tents, and some nights were obliged to walk about to keep from freezing. When they came to a river that was too deep to ford they made rafts to use in crossing. On the twenty-third of the month they arrived at Vincennes and opened fire on the fort that night. The next morning they demanded its surrender coupled by a threat that if it had to be taken by storm the officers would be treated as murderers. After some parleying the fort capitulated.

The fact that Indianapolis is almost in the exact geographical center of the state makes its being the capital and largest city seem very fitting. It has many important industries, and is noteworthy for the number of electric railways that radiate from it. When first surveyed in 1821, after it had been settled two years, it was a wilderness village of eight hundred people. One square mile was plotted for the future city. Now the inhabitants number over a quarter of a million, and the city area has increased to twenty-seven square miles. It became the capital in 1824. Even then the banks of the White River on which it is situated were dotted with Indian villages, and the red men were a constant source of apprehension. For more than a dozen years afterward the public squares were feeding-

Lower Falls Cataract

First State House, 1811, Corydon

grounds for the oxen and horses which drew the teams of the countrymen to the town market, "stumps stood in the streets, the mud was only navigable to a man on a tall horse, the buildings were ugly and unpainted, and the people were raw immigrants dressed in butternut jeans, and for the most part afflicted with the 'ague' and the 'yellow janders.'" The city's first railroad arrived in 1847, and within a few years the place became an important railroad center. Its Union station is one of the most commodious and beautiful in America.

About sixty miles northwest of Indianapolis, not far from the city of Lafayette, was fought the famous Battle of Tippecanoe in November, 1811. Several hundred Indians under the leadership of Tecumseh had gathered there on the west bank of the Wabash near where it is joined by the Tippecanoe. Gov. William Henry Harrison with 1000 troops defeated the Indians, who fled in a panic from the region; and never again did a purely Indian army combat the whites east of the Mississippi.

Hangmans Bridge over Lost River

On the sand-dune and scrub-oak wilderness of the Indiana lake shore region is that wonderful youthful city of Gary, founded in 1906. The United States Steel Corporation chose this spot, twenty-six miles from Chicago, for the site of one of the greatest steel-producing plants in the world, because of its proximity to markets and its harbor possibilities. The city has its huge mills, including by-product coke ovens, and it has amazing metropolitan features of construction and of architectural beauty. Besides, it has a school system that has won international fame for its originality in developing the whole child, physically, mentally, and in manual dexterity.

Photo by Franklin Booth.

CREEKSIDE WOODLAND

Down in the far southwestern corner of the state a community known as the Harmony Society bought 30,000 acres of land in 1814, and the next year emigrated thither from Pennsylvania and established the town of Harmony. Property was held in common. For ten years the colonists, who for a time numbered nearly eight hundred, cleared the land, planted vineyards, and manufactured woolen and cotton goods, and shoes. Then they sold their property to Robert Owen, a Scotch manufacturer and social reformer,

and returned to Pennsylvania. Owen attempted to organize an ideal socialist community, and by the end of 1825 about 1000 people had established themselves at New Harmony, as they called their town. But the details of community life proved irksome to many, and there was a rapid disintegration. A considerable number of the old communistic buildings still stand, and the place has an attractive air of antiquity and peace.

Coming from the Spring-house

In southern Indiana, eight miles from Milltown, is the extensive Wyandotte Cave, which has a good deal of beauty in its adorning of stalactites and stalagmites.

The highest point in the state is on its central eastern border at Carlos, 1210 feet. Indiana is called the "Hoosier State," and the people "Hoosiers," but the significance of the nickname is uncertain. One distinguished Hoosier was Lew Wallace, a general in the Civil War, and author of "Ben Hur." He was born at Brookville, seventy miles southeast of Indianapolis, in 1827. Edward Eggleston, whose "The Hoosier Schoolmaster" and other novels dealing with Indiana life are still read, was born in 1837 at Vevay on the Ohio River in the southeastern corner of the state. James Whitcomb Riley was born in 1849 at Greenfield, twenty miles east of the capital. The realism, humor, and philosophy of his verse

have made him the poet laureate of Indiana and beloved the country over. His home was in Indianapolis in later life and he died there in 1916. That prince of contemporary humorists, George Ade, was born in 1866 at Kentland, about forty miles northwest of Lafayette. A little to the south of Lafayette was born, in 1870, near South Raub, John T. McCutcheon, one of the most famous of our newspaper caricaturists.

©Detroit Pub. Co.

The *Roosevelt* Passing through State Street Bridge

XXV

Illinois

On the south side of the Illinois River, seven miles below the city of Ottawa, is an immense cliff peculiarly conspicuous for its isolation and the inaccessibility of its summit. It rises to a height of one hundred and twenty-five feet directly from the river's border, as abrupt on three sides as a castle wall. The only way to climb it is by a steep narrow path in the rear. The circuit of its level top measures about six hundred feet. There La Salle began the erection of Fort St. Louis in November, 1682, immediately after his return from discovering the mouth of the Mississippi. Scarcely was the wilderness fort completed when the Indians flocked to the vicinity to dwell in supposed safety protected by the French flag; and the occupants of the rock looked down on a multitude of black tepees scattered far along the opposite

bank of the river. One spring the French were obliged to defend the rock against a sudden attack of invading Iroquois, but after six days, during which several desperate attempts were made to storm the defenses, the savages retired. In 1702 the fort was abandoned by the military authorities. The great chief, Pontiac, was killed in 1769 by a treacherous Indian of the Illinois tribe at Cahokia, which is a little south of East St. Louis. Those nations which were loyal to Pontiac at once went on the warpath to avenge his death. They almost annihilated the Illinois. One band of fugitives took refuge on the high rock where the French fort had been, and there kept their enemies at bay. But their provisions soon failed, and their supply of water was stopped by the besiegers cutting the cords attached to the vessels they used to draw it up from the river below. They all died of hunger and thirst, and many years afterward their bones were seen whitening on the height, to which their tragic fate has given the name Starved Rock. This rock is now in a state park.

The oldest permanent settlement, not only in Illinois, but in the entire Mississippi Valley, was Kaskaskia, some six miles above where the river bearing that name joins the Mississippi. It was first an Indian village, then a mission station, but slowly gathered to it a vagrant white population. The French established themselves there in 1700. At the outbreak of the Revolution all the region was under British control, and in 1778 a colonial force came thither from Kentucky led by George Rogers

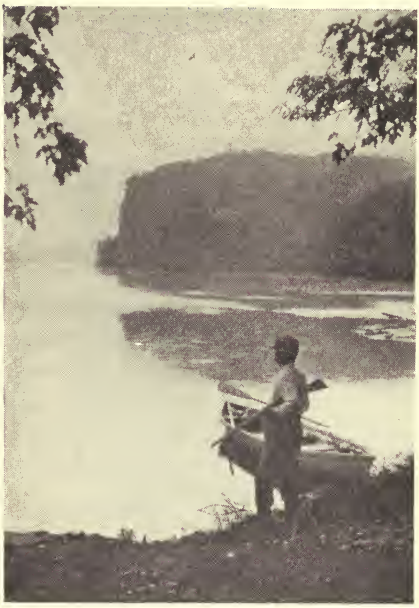
Starved Rock on the Illinois River

Clark, a restless rover of the woods, who at that time was only twenty-six years old. A surprise attack at night put Kaskaskia in his possession in fifteen minutes without firing a gun.

The honor of being the first American settlement in Illinois lies undecided between New Design and Bellefontaine, neighboring towns south of East St. Louis in Monroe County, and both settled about 1782. Up to the close of the Black Hawk War, Illinois was the far frontier, and as late as 1840 several of its counties were without a single settler. It was about 1829 that the celebrated Black Hawk, then sixty years of age, endeavored to rally all the Western Indians into a confederation to resist farther encroachments of the whites, but he only succeeded in persuading the young and restless of two tribes, the Sacs and Foxes. With these followers he made his headquarters on the north side of Rock River about a mile from its junction with the Mississippi, on a high bluff since known as Black Hawk's Watch Tower. The situation became so threatening that troops were called out, and when, in May, 1832, Black Hawk withdrew up the river they followed him. At a spot twenty-five miles beyond Dixon they were disastrously defeated, and they retreated in a panic. Then the Indians swarmed down on the exposed settlements and wrought sad havoc clear to the Illinois River. On June 24 Black Hawk made a violent attack on a log stockade with strong blockhouses at the corners, known as Apple River Fort, in the northwest corner of the state, fourteen miles

The Ohio at Cairo

east of Galena. The women and children helped the twenty-five men in the fort by molding bullets and loading guns, and at the end of fifteen hours the besiegers withdrew. Later in the year the Indians retreated across the Wisconsin line.



Bluffs of Rock River

Illinois had its first seat of government at Kaskaskia, but when it became a state in 1818 commissioners selected as the site for its capital a bluff in the wilderness beside the Kaskaskia River, sixty miles east of Alton. They called it Vandalia, and laid it out with broad streets, and a handsome square whereon was erected a two-story frame State House. One small wagon served to transport at a single load the entire state archives from Kaskaskia. Agitation for another removal of the capital at length developed, and in 1837 the legislature selected Springfield from twenty-nine places that aspired for the distinction. Springfield's settlement dates back to 1819, when a single family from North Carolina made its home there beside Spring Creek. Abraham Lincoln was long a resident of the place, and here are the office in which he practiced law and the house he occupied when elected President. His remains rest beneath a magnificent monu-

ment in the beautiful Oak Ridge Cemetery. On the north side of the city are the State Fair Grounds, the most extensive of their kind in the United States. The annual fair, which continues the first ten days of October, attracts crowds from the entire middle West. Roundabout the capital are rich coal mines.

A Mormon Doorway in Nauvoo

For a period of twenty-five years after 1813 the most important social and political center in Illinois, and the chosen home of wealth and refinement, was Shawneetown on the Ohio River, a few miles below the mouth of the Wabash. Now it is a quaint old village brooding over its past glories.

Cairo is worthy of a visit because it is at the meeting of the two great rivers, the Ohio and the Mississippi. Its founders anticipated its becoming the biggest city in the Mississippi Valley, but the location was unhealthful and subject to floods. Since 1858, when it was nearly destroyed by an inundation, it has been protected by extensive levees. Charles Dickens aroused its wrath by his comments on the place in his "American Notes," and by his "Martin Chuzzlewit," the whole plot of which hinges on real estate speculations at "Eden," as Cairo was called in the novel.

Somewhat north of East St. Louis on the bank of the Mississippi is the busy industrial city of Alton, historically interesting as the place where, in 1837, attempts to establish an antislavery paper resulted in riots and in the martyrdom

of the editor, Elijah P. Lovejoy. A little farther up the river, just below the mouth of the Illinois, are those strange rocks, fashioned into oddly sculptured forms by waves and weather, marked on ancient French maps as the "Painted Rocks." When Marquette and his companions journeyed down the great river in their canoes in 1673, they saw on the flat front of one of these high bluffs, painted in red, black, and green, a pair of hideous monsters such as could only be conceived in the brain of savages.

About one hundred and fifty miles north on the river is Nauvoo, whither came in search of peace 15,000 Mormon Saints, in 1838, from farther east where they had been ridiculed and persecuted. They found here the little village of Commerce, the name of which they changed to Nauvoo, which means the "City of Beauty." The place was not long in becoming the largest and most promising in the state; but in less than ten years it was well-nigh deserted, much of the Mormons' property had been confiscated, and their prophet, Joseph Smith, and others had been slain. The place has stagnated ever since, and yet its commanding plateau overlooking the river is very attractive. The great Mormon temple which stood at the crest of the rise is gone, but many of the village streets are as they were, and you can trace the orderly plan of the vanished metropolis in the grass-grown thoroughfares. On the high river bank at the south end of Main Street is the home of the prophet, a clapboarded unpainted farmhouse of moderate size, and on

An Indian Mound near Cahokia

Ottawa Indians

another street is the substantial brick dwelling of Brigham Young.

After the Mormons departed, a considerable number of communists from France settled at Nauvoo. Their leader was a great French lawyer, writer, and politician named Cabet, who wrote a novel called "A Voyage in Icarie," describing an ideal nation. This produced such an impression that soon nearly half a million persons signed themselves his followers. For a while the Illinois Icarians flourished. Mills were erected, workshops were equipped, their farms were well tilled, their school was one of the best in the state, they had an excellent library and an admirable orchestra, and they published a weekly magazine which won a wide circulation; but dissension developed, and Icaria disintegrated, though colonies in other parts of the country kept the movement alive till 1895.

In the most northwestern county of the state, at Charles Mound, is the highest spot in Illinois, 1241 feet above sea level. Illinois is called the "Prairie State." The greater part of it was prairie land originally, often in vast uninterrupted expanses, but sometimes broken by occasional belts of timber and groves of oak. The Mound Builders have left many of their earthworks in the state, and among these are the largest in America, near East St. Louis. Especially worth seeing is the Cahokia Mound, ninety feet high, and there are fifty others of enormous size in the vicinity. Relics of the race abound all the way up the Illinois River to Peoria, and also along the beautiful Rock River Valley. Some of those in the latter region are evidently intended to

represent figures of men, birds, quadrupeds, and reptiles. In the city of Rockford is the famous Turtle Mound, one hundred and fifty feet long and fifty feet wide.

Chicago, with its water front of twenty-six miles on Lake Michigan, is the nation's second largest city, and the greatest railway center in the world. Its growth has been phenomenal. In 1673 French explorers visited the narrow sluggish Chicago River that divides the city, and the early trappers and traders passed back and forth here because they had to carry their canoes only a short distance to get from waters tributary to Lake Michigan into those flowing to the Mississippi. Sometimes, when the streams were in flood, they could paddle straight through. In ancient times the Great Lakes sent their overflow by way of the Illinois and Mississippi rivers to the Gulf of Mexico. No permanent settlement was made where the city was to be until the government established Fort Dearborn in 1804. In August, 1812, great numbers of Indians gathered menacingly near the fort, which at that time contained a garrison of fifty-eight men, and their families to the extent of twelve women and twenty children. Settlers who had built five cabins in the vicinity came into the fort, and on the fourteenth of the month

Masonic Temple, Chicago

Capt. Wells with a party of thirty Miami warriors reënforced the garrison. The Indians promised protection if the inmates of the fort would desert it and give them the stores and ammunition. On the following morning, therefore, the people all left the fort to go to Detroit, and began traveling along the sandy beach with their wagons; but when they got to what is now the foot of 18th Street they were attacked by half a thousand Indians who had been escorting them. The friendly Miamis soon fled, and the whites were overwhelmed. Forty were taken prisoners and the rest, including two women and twelve children, were massacred. The fort was rebuilt two years later, and soon became the center of the fur trade in that part of the country.

A Tower, University of Chicago

In 1830 a merchant who arrived on a schooner with a small stock of goods built near the fort a log store, "which made an important addition to the trade of Chicago." The next year the place had one hundred inhabitants, but after that its growth was rapid, and within a short time one of its citizens in a wildly optimistic mood predicted that it would some day become a city of 10,000 people! For many years the quagmire condition of the streets, and the frequent inundations from lake and

In Washington Park

river, caused Chicago to be derisively termed the "Amphibious Town." By filling in the land the city long since lifted itself out of the mud, and now the level of the streets is eight feet above the original marsh. In 1843 an ordinance was enacted declaring that hogs should no longer be permitted to run at large in the streets. The first steamboat to reach the city arrived in 1832. Chicago's earliest railroad connected it with Galena, nearly two hundred miles west. Ten miles had been completed in October, 1848, when the first train made a trip.

The city was the scene of a terrible conflagration in October, 1871, which swept over three and one half square miles and destroyed 17,500 buildings with a value of nearly $200,000,000. About two hundred people perished in the flames, and 100,000 were left homeless. The fire found the city of wood, but the new city was of brick and stone.

Chicago is primarily a great market, the natural distributing point of the continent, and the center of the country's sources of demand and supply. It occupies a strategic position in the movement of commerce both by water and by rail. All the grazing states of the West ship stock to Chicago, and nearly a square mile in the city is taken up by the Union Stockyards, to which come every year some 8,000,000 hogs, and 4,000,000 cattle, and 4,000,000 sheep. From here are sent away meat supplies that go all over the world. So cosmopolitan are its citizens that each of fourteen languages besides English is spoken by more than 10,000 people.

The city has a remarkable system of small parks and boulevards, some wonderful residence streets, and excellent bathing beaches. Pleasure steamers ply on the lake, and so many recreations are easily available that it has a good deal of charm as a summer resort.

The name of the city is of Indian origin. It means "Wild

Onion." Chicago has acquired the nickname of the "Windy City."

Thirteen miles north is Evanston, where are some of the finest suburban homes in America, and at forty-six miles is Zion City, famous as the place built up by the singular religious society founded by John A. Dowie.

The people of the state are popularly called "Suckers," a name first conferred on the early Illinois miners who used to come down from "up river" each year at the time the suckers in the streams migrated.

Mackinac and Its Ancient Fort

XXVI

Michigan

In the narrow sixty-three-mile long river connecting lakes Superior and Huron is a half mile where the water runs in swift violence over a ledge of rocks, forming the Sault Sainte Marie, or, to put it in English, the Rapids of St. Mary. The adjacent banks were a gathering place for the Indians from time immemorial. Here they fished in the rapids and portaged their canoes along the shores. It was here, in 1668, that Father Marquette founded a mission, which was Michigan's first settlement. The great attraction for the traveler who visits the "Soo" is the locks. The falls were a barrier to the birch-bark canoes of the savages, and likewise to the bateaux, sailing vessels, and steamboats of the whites, which could move freely on all the lakes below as far as Niagara. Many wise Americans considered the project of building the first ship canal and locks at the "Soo"

Vessels Passing through the "Soo" Canal at Night

both extravagant and visionary, but in 1855 the canal was completed with a lock three hundred and fifty feet long, which every one agreed would provide amply for any vessels that would ever navigate those waters. Fifteen years later the lock was enlarged, and again in 1896, when one eight hundred feet long was built, which was the biggest and costliest in the world. Even this proved inadequate. The present lock is one thousand three hundred and fifty feet long and eighty feet wide. For six months of the year an average of a big steamer every fifteen minutes of the day and night passes through, and their annual tonnage is three times as great as that passing through the Suez Canal. One of the things to do at the "Soo" is to shoot the Rapids in a canoe guided by an Indian. It is an exciting, but reasonably safe, experience. There is good trout fishing above the Rapids and in the neighboring streams. The adjacent region is largely peopled with Indians and half-breeds, who cling to their tribal customs. They come to the "Soo" during the summer with dogs hitched to little wagons, or paddle thither in canoes laden with willow ware and other souvenirs for sale.

Of all the Great Lakes resorts the Straits of Mackinac have the finest combination of scenic, historic, and climatic attraction. Mackinac Island, with its tiny harbor, quaint

village, and old fort, and its castellated rocks that front the water, is a gem. It is about three and one half miles long and two broad. Its name was formerly spelled Michilimackinac, which is an Indian term meaning Great Turtle. This refers to the island's fancied resemblance to that animal, as seen from a distance. Fishing and sailing can be had in the vicinity at their best. Marquette wintered on the island in 1670, and settlements were soon established here and at St. Ignace, north of the Straits, and Mackinaw, south of the Straits. In the spring of 1675, while returning to this vicinity with two companions in a canoe along the east coast of Lake Michigan, Marquette died at the age of thirty-eight, and was buried beside an obscure creek a short distance south of Luddington and of the promontory called the Sleeping Bear. One year later a party of Ottawas opened the grave, washed and dried the bones, and placed them in a box of birch bark. Then, in a procession of thirty canoes, singing their funeral songs, they paddled to St. Ignace, where the relics of the beloved missionary, who had "bright hair like the sun," were buried beneath the floor of the little chapel of the mission.

At Mackinaw City, in 1763, occurred one of the most dismal of Indian massacres, which is fascinatingly described in Parkman's "The Conspiracy of Pontiac." The British captured Mackinac Island at the outbreak of the War of 1812, and the Americans made an unsuccessful attempt to recover it in 1814. It finally passed into the keeping of the United States the next year, and then followed the great

Arch Rock, Mackinac

days when this was the chief center of trade and activity for John Jacob Astor's American Fur Company.

The story of "Hiawatha," which is a romance of the Ojibways, is given each year by these Indians near Petoskey on the shore of Lake Michigan, about forty miles south of the Straits. The play is rendered with great skill and charm on every pleasant day through the month of August.

A Lake Freighter Passing Detroit

Lake Huron, east of the Straits, is the most irregular of the Great Lakes, and among its attractions are no less than three thousand islands.

Michigan's chief city, and the oldest in the southern part of the state, is Detroit, founded by the French in 1701. It fell into British hands in 1763 along with the rest of the territory occupied by France in North America. Later that same year it was besieged by the celebrated chief Pontiac, who, in ten weeks' time, captured every British post west of Niagara except this. After the siege had lasted about three months reënforcements reached the fort, and the defenders sallied forth to make a surprise attack on the Indians. But they were themselves ambushed as they were crossing a bridge that spanned a little stream a mile and a half north of the fort. They were defeated with heavy loss, and the stream has been called Bloody Run ever since. Two months afterward Pontiac abandoned the siege. Presently the Indians' relations with the British became friendly,

and during the Revolution they sallied forth from there on their forays and returned with many prisoners and scalps.

In 1805 a fire ravaged Detroit and left nothing except one house, a few stone chimneys, and several old pear trees. The city is eighteen miles from Lake Erie, on the bank of the Detroit River, which connects it with the small Lake St. Clair, and so with Lake Huron. Here the shipping of the lakes passing up and down the narrow waterway can be seen to exceptional advantage. Among the other craft, you may see one of the aristocrats of the lake fleet — a passenger steamer, resembling in style and size the ocean liners. Of the freighters, the type of vessel that has the most curious individuality is the whaleback, a blunt-ended hulk with rounded gunwales. Its appearance and its manner

Steamers Pushing through Ice on Whitefish Bay

of rooting and rolling about in the waves have gained it the nickname of the "pig." Detroit is the most important automobile manufacturing center in the world.

To the north lies the beautiful Lake District of Oakland County. Seven miles from the city in that direction is the curious Grotto of the Virgin, erected "in memory of the

apparition at Lourdes"; and fifteen miles farther on is Mt. Clemens, a summer resort famed for its mineral springs. Thirty-eight miles west of Detroit is Ann Arbor, the home of the richly endowed University of Michigan, with five thousand students, one fifth of whom are women. Detroit was the capital of the state until the seat of government was moved to Lansing in 1838.

Looking across Portage Lake to the "Copper Peninsula"

Lake Superior forms most of Michigan's northern boundary. It is the greatest body of fresh water on the globe, and has an average depth of nine hundred feet, while Erie, the shallowest of the lakes, averages only eighty-four feet. The coast line is very irregular and has a length of 1500 miles. It is generally rock-bound, and its shores excel in picturesqueness. Its size and depth and northerly situation combine to keep its waters very cold even in midsummer, and this, with the clearness of the water, gives the fish unusually fine quality. The Pictured Rocks on the south shore have such repute that passenger steamers approach as near as possible to afford a view of them. But the best way to see this fantastic and romantic five-mile stretch of sandstone bluffs with its staining of color and its cascades is to go there from Munising in a motor boat. Sail Rock, which resembles a sloop in full sail, the

Grand Portal, and the Chapel are perhaps the most striking features of the series of cliffs. This vicinity is in the heart of the Hiawatha country, and Munising occupies the site of the wigwam of Nokomis.

The State makes one long upthrust into the lake, and right across the base of the peninsula is a rift that for most of its length is filled by the narrow, deep Portage Lake. A channel has been dredged the rest of the way to allow vessels to pass freely. A few miles back on the hills northerly is the great Calumet and Hecla copper mine, which was discovered in 1865 by a man who went into a hole, left by the roots of a big overturned pine tree, to get a litter of pigs that was there. The product of the Calumet and Hecla group of shafts has paid more dividends than that of any other mining corporation in the world. The Red Jacket Shaft is equipped with engines that hoist ten-ton cars of ore from a depth of a straight mile in a minute and a half. This shaft pierces the earth's crust farther below the ocean than any other hole in existence.

Load of White Pine Logs

A little to the west of the base of the peninsula are the Porcupine Mountains, the highest in the state, with an elevation of 2023 feet. Michigan is an Indian word which means Great Lake. The people have the nickname of "Wolverines," and Michigan itself is called the "Wolverine State."

Beside the Mississippi

XXVII

Wisconsin

Wisconsin, as a whole, is famous as a summer resort. It has been called the "Playground of the Middle West." Its name is of Indian derivation and means "Wild Rushing Channel," which indicates the character of many of its streams. The surface consists chiefly of a great plain without mountains, but abounding in hills. The highest point in the state is Rib Hill, near Wausau, with an altitude of 1940 feet. Much of the southern part of Wisconsin was originally prairie that had here and there patches of timber commonly called "oak openings," the trees being nearly all bur oaks.

The Mound Builders were ancient inhabitants of the state, and they have left a variety of their strange earthworks in the east and south sections to arouse the wonder and curiosity of the people of the present. Many of these

White Water Falls below the Horse Race

earthworks are "effigy mounds" that have the form of animals, usually in groups and of gigantic size. Among the animals represented are buffalo, moose, deer, fox, wolf, panther, and eagle. Some panthers have tails three hundred and fifty feet long, and there are eagles which measure one thousand feet from tip to tip of their outspread wings. Such mounds were probably objects of worship as guardians of the villages.

The first permanent settlement in the state was begun by a Canadian family at Green Bay in 1750. The body of water from which the town takes its name is a wide inreach from Lake Michigan. La Salle visited the bay in 1679 with his little fifty-ton *Griffon*, the first vessel that ever sailed on the Great Lakes. He collected a cargo of furs, and the *Griffon* was dispatched with them to Niagara. She was never heard of again. La Salle and such companions as remained with him voyaged southward in four canoes, exploring the Wisconsin shore.

State House at Madison

Storms delayed them, and they spent wretched days and nights among the rocks and bushes, crouched around driftwood fires with only their blankets to shelter them from rain and snow. Food was scarce, and they often paddled from morning till night with nothing to eat but a handful of Indian corn, and some hawthorn berries which they picked on the shore. Famine stared them in the face until one day, as they looked landward from their canoes, when they had reached the vicinity of the present Milwaukee, they saw numerous crows and eagles hovering above something that proved to be a deer killed by a wolf. This tided them over the worst of their stress.

The fur trade long remained the principal business of the inhabitants, of whom there were only 12,000 whites in 1836, when Wisconsin was set off as a territory. The site for the capital of the infant territory was selected from seventeen rivals for the honor, some of them actual settlements, but others "paper towns" that existed only on the maps made by real estate speculators. One of the latter, Madison, was the winner, and a surveyor sent to set the stakes for the State House arrived in a blinding February snowstorm. The only man he found there was a French half-breed, who had put up a temporary trading shanty, half brush and half canvas. The place had only one hundred and seventy-two inhabitants half a dozen years later, and Indian wigwams were frequently

Temple Gate, Apostle Islands

set up within sight of the doors of the Capitol. Perhaps no city in the state better repays a visit than the present Madison. The picturesqueness of its location could hardly be excelled, for it is built between two lakes which are not only within the city limits, but are very close to the business center.

Racine Reef Lighthouse, Winter

The famous chief, Black Hawk, during his war with the whites, retreated from Illinois in 1832 across the Wisconsin line to the headwaters of the Rock River near Lake Koshkonong. A force of whites began operations against him in late June, and the Indians withdrew, but were overtaken and decisively defeated in the Battle of Wisconsin Heights on the east bank of the Wisconsin River opposite Prairie du Sac. Immediately afterward Black Hawk loaded a large raft with women, children, and old men, and sent it down the river, hoping they would reach the western side of the Mississippi. But they were intercepted by the soldiers on duty at Fort Crawford where the Wisconsin joins the greater river. Some were killed, some were drowned, some were captured, and others who escaped to shore nearly all perished in the wilds. The main body of Indians reached the Mississippi forty miles farther north at the mouth of the Bad Axe, where

the whites slaughtered most of them, showing no mercy to men, women, or children. Black Hawk got away to the Winnebagoes, but they delivered him to the whites. After being held in prison nearly a year, he was allowed to go to Iowa, where he dwelt on the Des Moines River in Davis County until he died, in 1838.

Much of the northern portion of Wisconsin used to be heavily timbered with lofty white pine, balsam, hemlock, and other cone-bearing evergreen trees. It is still possible to find elk, deer, bears, wolves, wildcats, and beavers in the wilder parts of the state. The popular name, "Badger State," and the nickname "Badgers" which the people have acquired, suggests a present or past abundance of these creatures. But really they are not found in Wisconsin. The sobriquet originated as a nickname for early lead miners who lived in dugouts that were like the hillside burrows of the badger. Wisconsin's largest lake is Winnebago, thirty miles long and ten wide. Fond du Lac at the head of the lake offers exceptional advantages for all kinds of sports the year through, and the eighty-mile drive around the lake is very enjoyable. Smaller lakes abound, many of which are notable for their beauty and for their clear waters, well stocked with fish. About thirty miles north of Madison is Devils Lake, six hundred acres in extent, on the summit of a mound three hundred feet high. In the flood season the Fox River, which is a tributary of Lake Michigan, and the Wisconsin River, which is a tributary of the Mississippi, flow into each other. A canal connects the two rivers so that steamboats can pass back and forth between the Mississippi and the lake.

The biggest place in the state is Milwaukee, at the mouth of a river of the same name, with a good harbor formed by erecting a huge breakwater. The river admits the largest vessels to the doors of the warehouses. About two thirds

of the people are Germans. The city hall has one of the largest bells in the world, and an illuminated clock dial that is visible for two miles at night. Washington Park on the outskirts of the city has the unusual attraction of a large herd of deer. Sheridan Drive, that skirts the lake to the south, affords a pleasant outlook on the water. Seventeen miles to the west is the well-known health resort, Waukesha, "Home of White Rock," where more water is bottled and shipped than from any other town in the country. About fifty miles southwest, at Lake Geneva, is located the Yerkes Observatory, equipped with a telescope that has a forty-inch lens, the largest in the world.

Wisconsin Farm Boys

INDIANS AND A BIRCH BARK CANOE, VERMILLION LAKE

XXVIII

Minnesota

The name of the state is of Indian derivation and means Sky-tinted Waters. The region abounds in lakes and ponds, and in some sections you cannot travel five miles without encountering one of these expanses of water. Many of them are linked together by small clear rivulets. Some are bordered by grassy slopes, others by precipices, and they often contain wooded islands. Their beds are generally pebbly, or are covered with small bowlders, which peep out along the shore. The water is usually sweet, clear, and cold. Fish are plentiful in them, and are much superior in flavor to those from muddy and warm waters. In some parts of the state are numerous waterfalls. A waterfall in the Dakotah tongue is called a "ha-ha," which may be translated "laughing-water." The best known ha-ha in Minnesota is that of St. Anthony, a fifty-foot leap of the Mississippi.

It was named by Father Hennepin, who had been taken thither, a captive, by a party of Indian buffalo hunters in 1680.

The State House at St. Paul

The government established Fort Snelling, in 1819, on a bluff six miles below these falls on the west side of the Mississippi just above the mouth of the Minnesota River. Here the first marriage ceremony in Minnesota was performed, the first white child born, and the first school taught. On the other side of the Minnesota River there developed the little hamlet of Mendota, inhabited by French and half-breeds with their Indian wives and children. In 1821 soldiers from the fort built a sawmill on the west side of the falls, where now stands one of the greatest flouring mills in the world. The land on that side was a military reservation not open to settlement, and a man named Parrant, who attempted to establish his home there, was driven off by the soldiers in 1838. He went down the river a few miles and built a whisky shanty on the east

The Falls of Minnehaha

side near the streamlet that issues from Fountain Cave. His hut was the beginning of the present city of St. Paul. The next year the village of St. Anthony was organized on the east side of the falls, and in 1851 a little hamlet called Minneapolis came into being on the opposite shore. Both at length became cities, and in 1872 they consolidated under the name of the latter. Since then Minneapolis has been the largest place in the state. With its magnificent water power it has grown into an important manufacturing center, and its location on the eastern edge of the great prairies of Minnesota and Dakota has made it the primary wheat market of the world. The city has more than fifty grain storage elevators, with an average capacity of a million bushels each. The twenty-five flour mills turn out every working day an average of over 55,000 barrels — enough to fill 275 freight cars. It requires the yield of 6,000,000 acres to supply their annual output.

A Canoe Trail

A tiny settlement that developed around Parrant's whisky shanty acquired a name in 1841, when a priest blessed a little log chapel the people

there had built, and dedicated it to St. Paul, "the apostle of the nations." The village began then to be called St. Paul's Landing. Since 1848 the place has been the capital of Minnesota. It became the political and professional center of the state, and it has excelled in the development of railway and general transportation enterprises. St. Paul and Minneapolis are so near each other and have grown with such similar rapidity that they are called the "Twin Cities." The State Capitol cost four and one half million dollars and is embellished with works of art by some of the most noted American sculptors, painters, and decorators. In the bluffs rising from the river are many caves which are used for cold storage purposes, or in which are grown mushrooms. The mushroom industry is one in which St. Paul leads the country. Somewhat east of St. Paul's business center is Indian Mounds Park. Here were originally sixteen mounds, but archæologists in their eagerness to investigate have reduced the number to six. About a mile to the south is the oddly named Pigs Eye Lake.

The beauty of Lakewood Cemetery, bordering two lakes on the outskirts of Minneapolis, can scarcely be excelled. The most delightful resort in the

Burntside Lake

region around the Twin Cities is Lake Minnetonka, fifteen miles west of Minneapolis. The lake is singularly irregular in outline, and while its length is not much over a dozen miles it has a shore line of nearly one hundred and fifty miles. Its outlet is Minnehaha Creek, which flows easterly through a romantic valley to the Mississippi. Within half a mile of the great river it makes a sudden descent of sixty feet in the graceful Falls of Minnehaha, immortalized in Longfellow's poem, "Hiawatha." The vicinity of the falls is a favorite for the people of the neighboring cities, and draws thither thousands of pilgrims from a distance every year.

Forest near Cass Lake

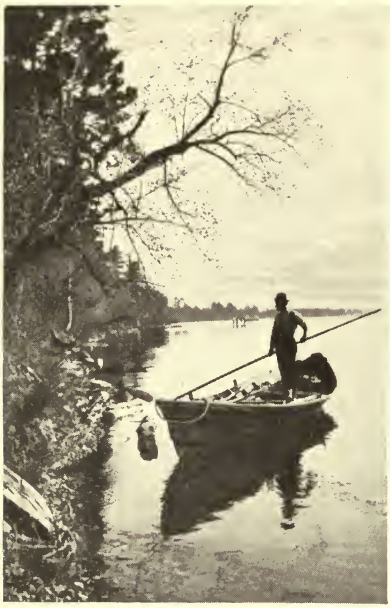
Minnesota contains the summit of the central tableland of the continent. Here, within a few miles of each other, are the sources of rivers which find outlets in Hudson Bay, the Gulf of St. Lawrence, and the Gulf of Mexico. The first attempt to discover the source of the Mississippi was made by an expedition led by Lieut. Zebulon M. Pike, which started from St. Louis in 1805. Pike made the latter part of his journey in winter on snowshoes to Cass Lake, which he believed to be the "upper source of the Mississippi." In 1832 Henry R. Schoolcraft, an Indian Agent located at

Sault Sainte Marie, visited the wilderness of the upper Mississippi, and went with his party in five canoes from Cass Lake to Lake Bemidji. Thence he paddled southward to a body of water which his Indian guide assured him was the beginning of the great river, and which he called Lake Itasca. Another person with a fever for exploration was a French astronomer named Nicollet, who visited the Mississippi headwaters four years later. He traced a tributary of Lake Itasca through two lakelets to a third from which he found "the infant Mississippi flowing with a breadth of a foot and a half, and a depth of one foot." This settlement of the matter was accepted till 1891 when a careful examina-

South Temperance Lake

tion resulted in finding an "ultimate bowl" from which Nicollet's three lakelets were fed.

Minnesota has a larger water area than any other state. There are approximately 10,000 lakes within its borders, ranging from one to thirty miles in diameter, and the majority



A Bateau on Lake Bemidji

of these are in what is called the Lake Park Region at the head of the Mississippi Valley. Nowhere is there better fishing than in this district, and the shooting is also excellent. Moose and bear lurk in the northern part of the lake area. Deer are plentiful, for, though thousands are killed each year, the supply does not diminish. It is possible to start on a hunting trip in the morning from a modern town that is within such easy reach of the wild game haunts you can be back by evening. Camping and bathing can be enjoyed to your heart's content, and one of the pleasures easily realized is making a canoe trip over a chain of lakes for a day or several days, going and coming by a different route. Only a few of the many resorts that merit a visit can be mentioned here. At Walker is Leech Lake, one of the biggest of the "bigwaters" of the "piney woods country," and the Leech Lake Indians still dwell thereabouts. An everyday catch for the angler in this lake is two or three score of bass or of the fighting golden perch. From Backus, somewhat to the south, is reached that family of lakes called Man Lake, Woman Lake, and Little Boy Lake. Cass Lake and its linked waters are favorite fishing-places for muscallonge. Muskies that weigh

A Duluth Elevator

sixty pounds are caught sometimes, and forty-pounders often. By canoe you can go from there up the Mississippi to Bemidji Lake or down to Lake Winnibigashish. Chains of lakes almost encircle Park Rapids. There is the Man Trap Chain of fifteen lakes, and the Crow Wing Chain of twelve, and the Fish Hook Chain of ten. Grand Marais is on the scenic north shore of Lake Superior, almost at the tip of Minnesota's "thumb," and back of it lies the region of Elbow Lake and Devil Track Lake in a glorious corner of the Minnesota "North Country." At International Falls you have reached Minnesota's northern "land's end" and have gained the threshold of the primeval woods-and-water region of Rainy Lake. You can start here with launch, motor boat, or canoe, and go exploring the lake on a hide-and-go-seek cruise among its hundreds of rockbound islands. Warroad, the farthest north town of Minnesota, is the gateway of the mighty Lake of the Woods that measures nearly a hundred miles

An Indian Wigwam

from head to foot. No other lake has in it so many islands.

Duluth, at the head of the mighty freshwater sea of Lake Superior, is the world's busiest inland port. In its harbor you see scores on scores of ships that hail from all the ports of the Great Lakes. They come laden with merchandise and coal for the Northwest, and go away loaded with grain, flour, and iron ore. The place takes its name from a Canadian trader and explorer named Du Lhut who visited the vicinity in 1679. It was settled in 1853, and had only eight white inhabitants seven years later. Ice stops all navigation in winter. April 19 is the average date of the first arrival of a vessel from the lower lakes, and December 5 the date of the last departure. Twenty-one inches of snow have been known to fall in twenty-four hours. The snow is usually dry, and it packs hard so that sleighing is a certainty all through the winter. Ski running is a favorite winter sport, and a jump of one hundred and seventeen feet was made at Duluth in 1908. The harbor is entered by a short canal, and travelers are interested in the ingenious aërial bridge by which teams and people cross the canal.

The iron country lies about a hundred miles to the north. Only a short time ago this was part of a vast forest region where the lumber industry was at its height, but many a once lively and prosperous town that was dependent on this industry is now almost depopulated. The first iron mines in the state were opened at Tower on Vermilion Lake in 1884. Tower is on the borders of a primeval land of tamarack, spruce, birch, and pine, of moose and caribou, and of birch-bark canoes. Here, too, are Indians who still live in aboriginal wigwams, and get their living largely by hunting and fishing.

Mining in the great Mesabi Range began in 1892, and a score of years later the output of the state had risen to nearly

two thirds that of the entire country. In some places the Mesabi beds of ore are so close to the surface that the mines are open pits, and often the ore is soft enough to be dug out with steam shovels, which take five tons at each thrust of the scoop and drop it into the cars behind them. The loaded cars bear the ore swiftly to the docks at Duluth, where it is transferred to the lake vessels, and, in less than a week from the time it was mined, it may have been made into rails and billets by the Pittsburg furnaces. The richest village in America is Hibbing, in the heart of the treasure land of iron of the Mesabi Range. This range reaches a greater elevation, 1920 feet, than any other spot in the state.

A Forest Fire

In the northwestern part of Minnesota, extending into Canada, is the Red River Valley, which is such a prolific wheat country that it is known as the "Bread Basket of the World." It is fifty miles across and all of two hundred miles long, and so level that after a rain the water stands in sheets on the fields. The roads have to be elevated a foot or more above the surrounding land, else they would be muddy much of the time. No matter in what direction you look, there is nothing to break the view except a farmhouse every half mile or so with a few trees around it. The winds have a free sweep, and in winter fierce blinding snowstorms are not uncommon.

An enchanting section of the state is the St. Croix River Country on the Wisconsin border. At Taylor's Falls you find the Dalles, where the river eddies in deep canyons of trap rock, and where the Devil's Chair and the Old Man of the Dalles and the Washington Rock and many more fantasies in stone frown down on the wild waters.

A half hundred miles south of St. Paul the Mississippi broadens into Lake Pepin, that measures three miles from shore to shore, and no less than thirty miles from end to end, and is flanked by mighty rock-crowned highlands, which sometimes rise five hundred feet above the

river. Lake City and Frontenac are favorite resorts on the shores of this so-called lake. Just above the head of the lake is Red Wing, on a bluff overlooking a long sweep of the picturebook region of the Upper Mississippi. Here is excellent fishing for bass, pickerel, and wall-eyed pike.

Minnesota is called the "North Star State," a title it derives from the "Star of the north" on its seal. The people are nicknamed "Gophers," from the abundance of this species of ground squirrel in the state.

A Lock at the Keokuk Dam

XXIX

Iowa

Iowa is the farmers' paradise. Nearly every acre of it can be cultivated, and repays generously the labor bestowed, the climate is kindly yet bracing, and access to markets is phenomenally easy. Every county seat has at least one railroad running through it. Iowa is the most purely agricultural of all the states, and it excels the others in raising hogs and horses. Its name is that of a tribe of Indians which formerly dwelt in the region, and means "Sleepy Ones." It is popularly called the "Hawkeye State," from an Indian chief of that name who was a terror to travelers there in early days. The people are nicknamed "Hawkeyes." Iowa is a typical prairie plain. It has no mountains, but the banks of the rivers are lined by bold limestone bluffs alternating with picturesque ravines. In the northeast portion are hills, down whose rock ledges the

streams often leap in attractive waterfalls. The vicinity of Mt. McGregor in this part of the state is especially varied and charming. Iowa attains its greatest height, 1800 feet, at Primghar, O'Brien County, in the northwest corner. The greater portion of the state is so free from natural obstructions that most of the country roads are laid out in straight lines and cross each other at right angles with the absolute regularity of a checkerboard.

The first settler was Julien Dubuque, who came from Canada in 1788 and obtained a grant of a large tract that included the city which bears his name and the rich mineral lands roundabout. He built a fort, carried on the mining of lead, and traded with the Indians until his death in 1810, when the settlement was abandoned. Not until 1832 were there any permanent settlements. In that year two groups of emigrants established themselves down in the southeast section on the banks of the Mississippi, one group where Fort Madison now is, and the other in the neighborhood of Burlington.

Des Moines, the metropolis of the state, became the capital in 1857. It was originally a frontier fort built in 1843, not to protect the whites from the savages, but to secure for the Sac and Fox Indians the peaceful possession of their hunting grounds until negotiations were completed for the purchase of the land. The fort consisted simply of one-story log huts with puncheon floors for the troops' quarters, a storehouse, hospital, and stables. Never has a finer farm region been opened for hu-

The Mississippi near Mt. McGregor

man settlement than the virgin Iowa country, and the stories of its marvelous fertility gave a tremendous impetus to emigration. Even before the Indians' title to the land had expired many whites had slipped over the borders and spied out the most desirable places for settlement. Stories are told of men roosting high in trees for days to keep out of sight of the troops. On the night of October 10, 1845, men were stationed in all directions from the fort ready to

Photo by Brown Brothers.

Cutting Wheat near Des Moines

measure off their claims. Precisely at midnight a signal gun at the agency was fired. Answering guns rang out sharply in quick succession from hilltop and valley for miles around. The moon was shining dimly, and its beams supplemented the fitful gleams of the settlers' torches as they hastily made their rough surveys, marked by slashing trees, or setting stones or stakes. Stage coaches furnished the chief public means of conveyance in the region until the railroad entered Des Moines in 1866.

In the northwestern part of the state, close to the Minnesota boundary, is Spirit Lake, a popular summer resort. Okoboji Lake near by is also attractive. Down toward the

southwest corner of the state is Council Bluffs, on the main route of the Union Pacific to California. Its name memorializes a council held with the Indians in the vicinity by the explorers, Lewis and Clark, in August, 1804. An interesting experiment in the city is the use of "Boy Policemen" to supplement the regular force.

At Amana, in eastern Iowa, twenty miles southwest of Cedar Rapids, is the largest and most prosperous communistic settlement in the country. The members of the society here are 1800 Germans who style themselves "Inspirationists." They cultivate 25,000 acres of land, keep flocks and herds, have sawmills and gristmills, and produce woolen and cotton fabrics. In their four churches, all under one roof, are held quaint religious services. The roads in this section of Iowa are very bad in wet weather on account of "gumbo," a peculiar soil that attains the limit of slippery stickiness when wet.

Quoits in the Village Where Mark Twain Was Born

XXX

Missouri

When Father Marquette and his companions came down the Mississippi in 1673 their frail canoes were almost overwhelmed at the mouth of the Missouri, whose yellow torrent swept masses of driftwood, including entire uprooted trees, into the main stream with great violence. Marquette was interested to note that the clear water of the river from the north and the muddy torrent from the west continued side by side without mixing for many miles. The Missouri bears an Indian name, which means "Big Muddy." It is 2908 miles long, while the Mississippi above their point of meeting is only 1330 miles. The former contributes the larger amount of water to the joint stream. It is subject to two annual floods, one in May caused by the melting of snow on the lowland prairies, the other in June caused by the melting of the mountain snows.

The earliest Missouri settlement was St. Genevieve, fifty

miles down the Mississippi from St. Louis. It was founded about 1705. Nearly a score of years later the French erected a fortification, which they called Fort Orleans, on an island in the Missouri River near the mouth of the Osage. They tried to establish friendly relations with the Indian tribes, but two years had scarcely passed when the savages attacked the fort, and not one of the garrison survived to tell the tale.

St. Louis, twenty miles below the mouth of the Missouri, began as a fur-trading station in 1763. The town's first church was built seven years later. Its walls were of flattened logs set on end, and the interstices were filled with mortar. At the time of the Revolution the people dug a trench and erected a stockade around the town, and in the center of the inclosure built a fort which they supplied with four small cannon. One May morning in 1780 a thousand Upper Mississippi Indians led by Canadian-French renegades appeared, slew forty field-workers and captured fifteen others. The fortifications and the booming of cannon saved the fort. The Spanish governor was drunk and came to command the defenders sprawling in a wheelbarrow and muttering incoherently after the Indians had been repulsed and gone off up the river in their war canoes. When the United States acquired Louisiana in 1804, St. Louis was a village of one hundred

Market Day

A Rail Fence, Ozark Mountains

and eighty houses, most of them one-room log cabins built after the French fashion with the logs set upright in the ground or on plates. It had one doctor and three blacksmiths, and it had a bakery, two mills, and two small taverns. The place was a resort for men clad in buckskin and carrying rifles, and for Indians in paint and feathers. From there the employees of John Jacob Astor's American Fur Company in search of peltries went forth in all directions — some of them to the very surf of the Pacific.

In 1808 the first newspaper established west of the Mississippi began publication at St. Louis. The first steamboat that ever ascended the Mississippi above the mouth of the Ohio arrived at St. Louis August 2, 1817. The motive power of the engine had to be reënforced at times by the exertions of the crew, who resorted to poling. She did not run at night, and was six weeks in coming from Louisville. All the citizens of St. Louis had gathered to welcome the novel visitor. Among them was a group of Indians, who were filled with such dismay by the noisy machinery and murky smoke that they fled to the high ground back of the village. In 1849 a fire started on the steamer *White Cloud* lying at one of the wharves, and in half an hour twenty-three steamboats had been abandoned to the flames after vain attempts to cut loose from their moorings and shove out into the stream. The wind blew hard shoreward, and the fire burned or seriously damaged fifteen blocks of buildings. The total loss was $10,000,000. So devastating a fire had

never before been known in the United States. Property of about the same value was destroyed by a tornado in May, 1896, and three hundred persons were killed.

St. Louis is the metropolis of the Mississippi Valley, in the very heart of the continent, midway between the East and West, the North and South, and the removal thither of the national government has been advocated as recently as 1875. It has the reputation of combining Eastern thrift, Northern energy, Western enterprise, and Southern hospitality.

Twenty miles west of the city is St. Charles, where can be seen Missouri's first State House and the executive mansion occupied by the first governor. At Fulton, a hundred miles farther west, is the stone house in which Daniel Boone, the famous pioneer, spent his last years and died in 1822. The capital of the state is Jefferson City, a prosperous place on the Missouri one hundred and forty-three miles above the river's mouth.

Eighty miles south of St. Louis is Iron Mountain, about 1100 feet high. It is an irregular hill capped with a deposit of iron, seventy per cent pure, which is from six to thirty feet thick. Pilot Knob, a half dozen miles farther south, contains another wonderful bed of iron ore. In this vicinity is Taum Sauk Mountain, with an altitude of 1750 feet, the highest in Missouri.

Mark Twain's Boyhood Home at Hannibal

On the northwestern border of the state is Hannibal, a river port and railroad center chiefly interesting as the boyhood home of "Mark Twain." The house

in which he lived is now the property of the city and is maintained as a permanent memorial. Here the humorist got inspiration for two of his most popular books — "Tom Sawyer" and "Huckleberry Finn." Great ragged bluffs rise along the river front, and farther back are many wild hills and glens. Two miles north, up the "River Road," is a hill where the boys used to dig for treasure, and three miles beyond the town in the other direction is a cave in which Tom Sawyer had some notable adventures. The author's birthplace was Florida, a little town up Salt River, twenty-five miles away. There "Mark Twain" was born in 1835 in the kitchen of a humble two-room frame house.

Gen. Pershing, who won fame in France during the World War as the leader to victory of the greatest force the United States ever put in the field, was born in 1860 on the outskirts of Laclede, a place of about seven hundred people then and now, in the north central part of the state.

On the boundary line in western Missouri is Kansas City, with about 250,000 inhabitants, and just across the line is another Kansas City with about 100,000 people. The places merge into each other and are practically one. The former is the second largest city in Missouri, and the latter is the largest city in Kansas. The Missouri city has the biggest railway station west of New York. It cost $6,000,000. A passenger train arrives and departs on an average every five and one half minutes day and night.

Missouri is called the "Bullion State" from the sobriquet "Old Bullion" applied to Senator Benton of that state because of his stand for gold and silver currency.

Logging in an Arkansas Forest

XXXI

Arkansas

Soon after Arkansas was admitted to the Union in 1836 it was observed that its two senators differed in the pronunciation and spelling of the name of the state. To one it was Ar-kan′sas. To the other it was Ar′kan-saw. Their colleagues presently fell into the habit of referring to one as "the gentleman from Arkansas," and to the other as "the gentleman from Arkansaw." For about a half century this matter of the name remained in doubt, and then the state legislature dealt with it, and affirmed that out of deference to one of the early senatorial disputants the name should be spelled Arkansas, and out of deference to the other it should be pronounced Arkansaw. It is an Indian name which means "Bow of smoky waters."

The surface of the eastern portion of the state is broken by swamps and small lakes, and is subject to overflow along the Mississippi, while in the western part are mountain

A Ford

ranges and peaks that give rugged variety to the landscape. The culminating height is Magazine Mountain, about one hundred miles west of Little Rock. This has an altitude of 2800 feet. The best known of the mountain ranges are the Ozarks, which extend over into southwestern Missouri, and, with the streams in their valleys, have a good deal of scenic charm.

Except in the swampy districts the climate is pleasant and healthful. The snowfall is light, and droughts are practically unknown. Cotton is the leading crop. Animal life continues abundant in the less settled sections and includes deer, wolves, wild hogs, panthers, bears, wildcats, beavers, coyotes, eagles, and wild turkeys. The Arkansas River, which flows across the state in an easterly direction, dividing it almost in the middle, ranks next to the Missouri as the greatest tributary of the Mississippi. It rises in the Rocky Mountains and is 1600 miles long. For one half of its course it is navigable.

Where Little Rock, the state's largest city, has grown up beside the river, a low promontory projects into the stream, while on the opposite shore rises a bold precipice. The former became known as Little Rock and the latter as Big Rock. The bluff that the city occupies is one of slight elevation, but sufficient to avert danger of overflow from the

river. The earliest white men to visit the region were French explorers who came in canoes up the Arkansas from the lower Mississippi. They found the first point of rocks on the waterways where the metropolis of the state now stands. *Voyageurs* ascended the stream to barter with the Indians for furs, and in 1686 Arkansas Post was established not many miles up the river from its junction with the Mississippi. Here the French and Spanish governors resided. It was an important trading post in the earlier days of American occupation and in 1819 it became the first territorial capital.

In 1814 there were three or four squatters dwelling at Little Rock, or near by, subsisting chiefly by hunting, trapping, and fishing. Their number increased, and an effort was made to give the place the name of Arkopolis. Even when Little Rock became the capital of the territory in 1820 it was only a handful of huts in a forest clearing. On the 4th of July of that year the first sermon ever heard there was preached in a log cabin to fourteen men, probably all the inhabitants of the place. The town was far from centers of population, and for many years it grew slowly. Early in 1861 the state officers seized the arsenal there, and shortly afterward the ordinance of secession was passed. The Confederates were defeated the following year in the far northwestern corner of the state at Pea Ridge and Prairie Grove; and in September, 1863, Union forces captured Little

PLANTING CORN

Rock. Just outside of Little Rock are the bauxite mines which furnish practically all the ore for the manufacture of aluminum in America.

Arkansas Hot Springs Reservation, which has the honor of being our oldest national recreation place, was created in 1832. It is in a mountainous region fifty miles southwest of Little Rock. The Springs were discovered in 1541 by De Soto and what was left of the Spanish exploring party which he led into the American wilderness. They fancied they had found the "long-searched-for Fountain of Youth, reported to exist somewhere in the country, but ten of the soldiers dying from excessive drinking, they were soon convinced of their error." According to tradition the Indians used to war among themselves for possession of these curative waters. The town is in a narrow gorge between two spurs of the Ozark Mountains. On one side of its wide Main Street are hotels and shops, and on the other side a row of attractive bath-houses. The springs, which are forty-six in number, vary in temperature from seventy-six degrees to one hundred and fifty-eight degrees, and discharge daily one million gallons of clear, tasteless, and odorless water. They have made the town one of the most frequented health and pleasure resorts in America.

Arkansas is known as the "Bear State" because bears used to abound in its forests. The people are nicknamed "Toothpicks," a playful allusion to the bowie knife, which was formerly called an "Arkansas toothpick."

GRAND LAKE CYPRESS TREES

XXXII

Louisiana

The climate of Louisiana is in general almost semi-tropical, and even in midwinter the weather is seldom severely cold. The surface of the state is mostly low and level. Much of the southern part is not over ten feet above the sea, and is liable to frequent inundations both from the rivers and from storm-driven waters of the Gulf. The highest portion is in the extreme north, where it attains an elevation of four hundred feet in Claiborne County. Louisiana is called the "Pelican State" from the pelican shown in the state seal. The people are popularly spoken of as "Creoles," a name which technically designates the descendants of the original French and Spanish settlers.

The chief natural feature of the state is the Mississippi River. De Soto was its discoverer in 1541, and after another year of exploring to the west of it he returned to its banks opposite Natchez and there died May 21, on Louisiana soil. Lest the savages should mistreat the body, his followers hollowed out the trunk of a large oak tree that they felled, placed the body in it, and at night rowed out to midstream with the oak coffin. Then they slid the coffin into the

stream, and the heavy green wood carried the body of the famous explorer to the bottom. In 1673 a French expedition led by Joliet and Marquette started from the Great Lakes in two large birch-bark canoes, and by way of the Wisconsin River reached the Mississippi, which they descended as far as the mouth of the Arkansas. Then they went back to the lakes. On April 9, 1682, La Salle, who had come with a fleet of canoes from the Lakes by way of the Illinois River, reached the mouth of the Mississippi, and took possession of the great valley in the name of France. He called it Louisiana in honor of his king, Louis XIV.

Cutting Sugar Cane

The territory drained by the Mississippi and its tributaries extends nearly to Canada and across more than half our country's width. The distance from the source of the Missouri to the Gulf is forty-two hundred miles, which no other river on the globe can equal, and only the Amazon discharges more water. In its last five hundred miles the Mississippi is from seventy-five to one hundred and

twenty feet deep. A prominent feature of this part of the river is the great levees guarding the land that lies behind them from floods. Sometimes the levees fail to hold the mighty river, as, for instance, in 1882, when a flood rendered 75,000 persons destitute. The river and its principal tributaries are navigable for many thousands of miles. The first steamboat to plow the waters of the river was launched at Pittsburg in the autumn of 1811. She was a stern-wheeler one hundred and sixteen feet long with two masts, and was painted sky blue. On January 10, 1812, she arrived at New Orleans. As the steamboat business developed, the rivalry between different lines became very fierce and resulted in many strenuous races for supremacy. Often the boats were stripped for the contest and pressed to the utmost. Probably the greatest steamboat race the world has ever seen was that between the *Natchez* and the *Robert E. Lee* in 1870. On the afternoon of June 30 the *Lee* backed out from the New Orleans levee to start for St. Louis. All parts of her upper works that were likely to catch the wind and that could be spared had been removed, and all business for way landings had been refused, and no passengers had been received. Five minutes after the departure of the *Lee* the *Natchez* followed. The whole country was interested in the race, and the details of its progress were reported by telegraph. Immense sums of money were wagered on the result. Crowds gathered at the various cities along the river. The *Lee* completed her trip in three days, eighteen

Old Plantation Home

hours, and fourteen minutes, but her rival became enveloped in a fog above Cairo and did not arrive at St. Louis until six hours later.

New Orleans, the largest city in the United States south of St. Louis, was founded by the French in 1718. At first it was mostly a village of trappers and adventurers. In 1762, when the French were being crowded out of the valley by the English, Louisiana, with the Mississippi River serving for most of the eastern boundary of its then vast territory, was acquired by Spain. It again became a French possession in 1800 only to be sold three years later to the United States by Napoleon, who was fearful that he could not hold it against the English. The domain swept northward to Canada and westward to the Pacific. The price paid was $15,000,000.

On Good Friday, 1788, a lighted candle in a home chapel fell against the lace draperies of the altar and started a fire which in five hours reduced more than eight hundred buildings to ashes. Six years later another destructive fire completed the work of blotting out the French town, and the old New Orleans we now know is the Spanish city which replaced the other. In the more ancient part of the town the streets generally have French or Spanish names, and there is a distinctive French quarter inhabited by Creoles, where the buildings have walls of adobe and stucco, tiled roofs, arcades and balconies, and inner courts with plashing fountains and semi-tropical plants. Fronting

Lake Pontchartrain

A Levee

on Jackson Square, formerly known as the "Placed'Armes," is the most notable of New Orleans churches, the St. Louis Cathedral, built in 1794. Near by is the Cabildo — the Spanish courthouse in colonial days, in which took place the transfer of Louisiana to the United States. Another building that has marked historic interest is the Hotel Royal, erected about 1830, and for many years the leading hotel of the South. For a time it did service as the state's Capitol. In its rotunda is the old slave block where negroes were sold at auction to the highest bidder. At 514 Chartres Street is the home of a wealthy merchant who conspired with a Louisiana pirate to make a sudden dash to the island of St. Helena with a swift yacht and bear the imprisoned emperor, Napoleon, to liberty. He fitted his house up magnificently to serve as the emperor's dwelling, but before the plotters were ready to embark, news came of Napoleon's death in 1821. The "Haunted House" at 1140 Royal Street has many strange stories told about the ogress-like French madame who used to dwell there — how she drowned slave babies in the cistern and tortured the adult slaves, and how, after she went away to France, lights shone from the windows of the vacant house at night, ghosts were seen, and the cries of the dead slaves were heard.

In the days of long ago the great negro gathering place was Congo Square, now Beauregard Square; and here on

New Orleans, a City Basin

Sunday nights wild dances used to occur, and sinister spells were cast. Later the voodoos went to secluded spots on the shores of Lake Pontchartrain.

Duels used to be of common occurrence. Slender swords were the favorite dueling weapons of the Creoles, but the Americans preferred pistols. As many as ten duels are said to have been fought in a single day under the ancient live oaks of the City Park, then out in the country. St. Anthony's Garden was another dueling ground much used. A not uncommon inscription in the old cemeteries is, "Killed on the field of honor." Burials are made above ground instead of in the watery soil, and the old St. Louis Cemetery, thickset with the brick and marble dwellings of the dead, is particularly interesting. Another cemetery that attracts numerous visitors has in it a stone chapel dedicated to St. Roch. The chapel is famous as a place where miracles are wrought. Thither people come to pray for whatever they happen to desire, confident that there is a much better chance of having their wishes granted than if they offered their petitions elsewhere. A considerable proportion of the chapel's patrons are young women who beg the good saint to send them husbands.

On the levee is the French Market, which reveals a scene of great animation, especially if visited at six or seven o'clock in the morning. The Ursuline Convent at the corner of Chartres and Hospital streets, built in 1730, contains a colonial musuem. Among the city thoroughfares are those

with such unusual names as Religious Street, Nuns Street, Piety Street, Amen Street, Mystery Street, Madman's Street, Love Street, and Good Children Street.

One of New Orleans' authors with an international fame is George W. Cable, whose novels of old Creole life in New Orleans and its vicinity have a striking individuality and charm.

The first woman in the United States honored by a monument was a dweller in New Orleans named Margaret Haughery. For a time she was a laundress at the St. Charles Hotel. Later she bought two cows and opened a dairy, and herself drove a cart to deliver the milk. Presently she bought a bakery and peddled bread instead of milk. The bakery grew to be a factory and she gave up peddling. Much of each day she was to be seen sitting in the open doorway of her factory office, and nearly every one who passed had a word with her. Ragamuffins, newsboys, clerks, porters, and great merchants and bankers all called her Margaret and nothing else. She always wore a calico dress, had a small shawl over her shoulders, and her only head covering was a sunbonnet. Margaret was thrifty, but not selfishly so. Her hobby was orphans, and the epidemics from which New Orleans suffered left a multitude of parentless little ones. Margaret gave food and collected it from others, and she gave money constantly. She

A New Orleans Street

never learned to read or write, and she signed with a mark the will that distributed her thousands of dollars among the orphan asylums of the city. When she died in 1882 a fund for a statue was at once collected and, almost before she was missed, there was the statue representing her in the familiar old chair with a little shawl over her shoulders as the people had so long seen her.

Both cholera and yellow fever have devastated New Orleans. In 1832 the two diseases raged at the same time, and in twelve October days a sixth of the population perished. But recently the city has provided good drainage, an excellent filtered water supply in place of her old mosquito-breeding cisterns, and modern sewers in place of cesspools. Rats have been killed by the hundreds of thousands, and many other things have been done to make the city healthful and attractive.

The famous carnival of Mardi Gras is celebrated in New Orleans annually with great splendor just before the beginning of Lent. The name is the French designation for the day preceding the one on which Lent begins. It means Fat Tuesday, a term derived from the fact that in Paris for many centuries a fat ox has been led in the carnival procession on that day followed in a triumphal car by a child called the "Butchers' King." New Orleans had its first Mardi Gras parade in 1837.

The city is the outlet of the greatest agricultural valley in the world, and is the leading sugar market, and among the most important of rice and coffee markets. Its docks are always lined with ships discharging or taking on cargoes. The place is half encircled by a great bend of the river, and thus has gained the appellation of the "Crescent City." A favorite pleasure resort is Lake Pontchartrain, five miles north, where an enjoyable fish and game dinner can be obtained. Six miles down the river is the battlefield where

Andrew Jackson with 5000 men defeated about twice that many British on January 8, 1815. The Americans behind their breastworks lost seventy-one in killed and wounded, and the attacking enemy lost over 2000. Peace had been signed in Ghent on December 24, but the news did not reach America until about a month later.

At the time of the Civil War a Union army acting in conjunction with a powerful fleet under Admiral Farragut captured New Orleans in April, 1862. The task of governing the city was turned over to Gen. Benjamin F. Butler, whom the people considered so unpardonably brutal in his methods that they called him "Beast Butler."

Dragging an Alligator from Its Hole

The whole of the southeast coast of Louisiana up to the very city is a network of bayous, lakes, and lagoons, threading vast desolate wastes of salt marsh, jungle, and forests of cypress and water-oak. The region is still the haunt of wild things, untraversed for the most part save by the pirogue of the pot-hunter or the negro moss gatherer. Turtles, snakes, and alligators abound, and herons, cranes, flamingoes, kingfishers, and pelicans hold a monopoly of the fisheries. The densest, most intricately water-threaded district of all is that lying around Barataria Bay. Through this bay and its tributary bayous the luggers of the Malay, Italian, and mongrel fishermen pass up to New Orleans. At

the entrance to the bay is Grand Isle, a former haunt of pirates whose most noted leaders were Pierre and Jean Lafitte, at one time distinguished citizens of New Orleans. An expedition broke up their establishment here in 1714, and a strong pirate force went down the coast fifty miles and fortified itself on Last Island. The Lafittes established themselves at Galveston, Texas, but the stay at both these places was short, though pirates continued to be a terror in the Gulf until 1821. Last Island had become a pleasure resort in 1856, when a savage tropical tempest obliterated it and its fashionable hotel with all the hotel's guests.

Below New Orleans the Mississippi becomes less defined, and the stream finally loses itself in the marshes through which various channels lead to the Gulf of Mexico. At the lower end of the South Pass are the wonderful jetties constructed by Capt. Eads in 1875 to 1879 at a cost of $5,000,000. They forced the river to scour out a channel thirty feet deep where formerly the draft was not more than ten feet. One jetty is two and one third miles long and the other one and one half miles long. They are made of willow brush, rubble, and concrete.

Morgan City, eighty miles west of New Orleans, is the starting point for a steamer trip up the picturesque Bayou Teche into the district to which the Acadians were exiled from Nova Scotia. The region around is one of great stretches of plain, with tree-lined waterways, magnolia groves, live oaks, and cypresses draped with Spanish moss, and plantations of sugar cane, cotton, and tobacco.

Baton Rouge, which has been the capital since 1881, is a quaint old place on a bluff beside the Mississippi. It got its name back in March, 1699, when some French explorers on their way up the river saw there a red corn stalk with the heads of fish stuck on it as an offering to the spirits from successful hunters.

Audubon, the naturalist, was born about 1780 on a plantation at Mandeville, twenty miles from New Orleans on the north shore of Lake Pontchartrain.

At Sulphur, in the southwestern corner of the state, are sulphur mines that produce about one hundred tons of sulphur a day. The sulphur, which lies in a bed several hundred feet below the surface, is melted by superheated steam and brought up through a pipe. A hundred miles to the east is a remarkable deposit of rock salt on Petit Anse, a small island in a marsh near Vermilion Bay, ten miles south of New Iberia. Brine salt was discovered here in 1719, but the rock salt, which lies about sixteen feet below the surface, was not found until 1861. This was almost the only source of salt supply for the Confederacy in the later years of the Civil War. It is estimated that the deposit consists of over 2,000,000,000 tons.

Houseboats at Vicksburg

XXXIII

Mississippi

The first settlement in Mississippi was made at Biloxi on the coast in 1699. The next year Fort Rosalie, now Natchez, was settled. In 1729 the Indians conspired to expel the French from that region. They were roused to this effort by the tyranny of the commandant of Fort Rosalie, who had ordered them to give up their village called White Apple. A day and an hour were appointed when all the French in that part of the country were to be attacked simultaneously. November 29, the fateful day, arrived, and, on some pretext or other, Indians called at every cabin of the white men, prepared to do their part in the massacre. Others swarmed into the Fort, explaining that they were getting ready to go on a hunting expedition and wanted guns and powder. At a given signal the Indians began their dreadful work. The commandant of the fort was one of the first killed, and his

head was carried to Chief Sun, who sat and smoked in the government warehouse while his followers slaughtered the defenseless whites. As the massacre went on more heads were taken to Chief Sun, and placed before him in a grim circle about the head of the commandant. Over two hundred whites were killed, and more than one hundred women and children were taken prisoners, as were also the negro slaves. Two soldiers, who happened to be in the woods, escaped to New Orleans, whence were sent avenging troops. These troops almost exterminated the tribe that had gone on the warpath. Nearly five hundred captives were sold to slavery in San Domingo.

In 1798 Natchez came into the possession of the United States and was made Mississippi's capital. At the time of the Civil War it was captured by Farragut. It is an attractive city with broad streets, finely situated on a bluff that overlooks the river. A portion of the place bordering the stream is called Natchez-under-the-hill, and was formerly a resort of river gamblers, pirates, and other desperate characters.

Vicksburg, by reason of the part it played in the Civil War, is one of the most interesting towns in the South, and its situation amid the Walnut Hills is very picturesque. It came into being in 1836, because then the increasing agricultural population of

Negro Cabins in Flood Time

the region decided that a town at that point on the Mississippi was a necessity for trade. The town was laid off on the plantations of William Vick and one other man. Vicksburg was the key of the Mississippi, and it was strongly fortified and garrisoned by the Confederates. Grant arrived in the vicinity to attempt its capture in January, 1863. The river made a great bend opposite the city, and he tried to dig a canal across the peninsula, which was only a mile wide, so that vessels could go up and down the river without coming in range of Vicksburg's guns. But after six weeks of the hardest kind of work, a flood drowned many of the horses and forced the men to fly for their lives. Later Grant's troops went down on the west side of the river, and on the night of April 16 some supply boats ran past the eight miles of batteries. Another supply fleet got down the river a week later. These boats enabled the army to cross the river, and soon the city was besieged. Admiral Porter's fleet bombarded the place incessantly, and many of the people took refuge in caves that they dug in the clay hills. Vicksburg people say that "The Yankees could have shelled the city till hell froze over without capturing it." What caused its surrender on July 4 was starvation. The battlefield is a national park.

A Dugout

Jackson, which has been the capital since 1815, is also the state's largest city. Down on the coast, five miles west of Biloxi, Jefferson Davis had his country home in later life, and there died in 1889. Fifteen miles farther west is Pass Christian, the chief winter and summer resort on the Gulf Coast, which is here sandy and exceptionally healthful.

Mississippi is called the "Bayou State," a name that refers to the abundance of sluggish inlets along its rivers, especially along the great river which forms its entire five hundred mile western boundary. The state's highest point is near Iuka in the far northeast corner, seven hundred and eighty feet above the sea level. "Tadpoles" is the nickname for the people of the state. This is equivalent to Young Frenchmen, for the derivation is based on the fact that Parisians used to be called Frogs.

The Alamo at San Antonio

XXXIV

Texas

Texas is nearly as large as were the original thirteen colonies. It is a land of illimitable distances. There are more miles between its northernmost point and the mouth of the Rio Grande than between Chicago and New York. East and west it measures nearly as much, and to travel across it in either direction by the fastest train now running requires several hours more than a full day. There is much divergence in its climate. Orange and lemon trees flourish in the southern counties, but a two-foot snowfall is not uncommon in its northern upreach known as the Panhandle. From east to west the rainfall steadily decreases, and the splendid pines and oaks of the easterly portion give way to less pretentious growths, ending with the stubby mesquite and insignificant sagebrush.

In the Panhandle is Deaf Smith County, and several other counties in the state are named in a somewhat similar

familiar way. Many years ago a governor, James S. Hogg, was honored by having a new county created by his friends in the legislature, and it appears on the map as Jim Hogg County. Texas has about two hundred and fifty of these county divisions. If the entire population of our country was concentrated in Texas it would not be as crowded as in some of the New England states. Gen. Sheridan is reported to have said, "If I owned hell and Texas, I would rent Texas and live in the other place"; but his experience in the state was that of a lieutenant in the frontier days before the Civil War.

Six flags have flown over Texas. The first was that of France brought by the explorer La Salle. He came down the Mississippi River to the Gulf of Mexico. On New Year's Day, 1685, he sailed into Matagorda Bay, and there established a short-lived colony. A quarter of a century later the Spaniards planted a mission at San Antonio. Twenty-five presidios, or forts, as we would say in English, with their accompanying missions, were founded on Texas soil during the hundred years of Spanish occupation, but they did not thrive. Next Mexican rule was substituted with little better results, and at the end of fifteen years the Texans revolted, and established a republic with the lone star flag for their emblem. This flag gave Texas its popular name of the "Lone Star State." The republic lasted nearly ten years, and then, in 1845, it became one of the United States. Another change of flags occurred when, in the Civil War, Texas joined the Confederacy.

San Antonio is the earliest permanent settlement in Texas. The spot was selected in 1690 because here were a number of springs that bubbled up out of the earth and formed a beautiful little stream of marvelously clear water. A mission was established and presidio built, and during practically the whole of the Spanish and Mexican occupation San

Antonio was the capital of the province. Fronting on the plaza in the heart of the city is one of the most famous historic buildings in America. It is a low, strong, thick-walled structure erected in 1744, and was probably the chapel of the mission. It was called the Alamo from the fact that it was in a grove of alamo or cottonwood trees. When Texas declared its independence of Mexico its action aroused great enthusiasm in the United States, and many of our people went to aid the Texans in their struggle for liberty. Among these was Col. Bowie, inventor of the celebrated hunting knife that bears his name. Another was Davy Crockett, the mighty hunter, in buckskin clothing and coonskin cap, carrying his favorite long rifle named "Betsy." They and other Americans, one hundred and eighty-six in all, fortified themselves in the Alamo, where they were besieged by four thousand Mexicans, commanded by Santa Anna, the dictator of Mexico. Day after day the defenders withstood the attacking host from February 23 to the morning of March 6, when a breach was made in the yard wall. The frontiersmen then withdrew to the interior of the building, where a desperate hand to hand conflict ensued. The unequal contest reeled to and fro between the shattered walls until gradually the defenders were all killed. Crockett was one of the last to fall. Wounded, and ringed around with the bodies of the men he had slain, he continued to face the foe with his back to the wall as long as he could stand. Wood was brought from the neighboring

Water Tower, San Antonio

forest, and this and the bodies of the defenders were arranged in alternate layers in a huge pile and burned toward the end of the afternoon.

Ruined Mission of San José

A half dozen years later San Antonio had its most serious affair with the red men, when sixty-five Comanches, including women and children and twelve chiefs, came thither to a conference. This was held in the courthouse which stood at the corner of Market Street and the main plaza. A dispute arose, and the chiefs strung their bows, drew their knives, and made a dash for the door. Soldiers who were present fired on them, and soon every chief lay dead on the floor. The warriors and squaws outside took up the fight, and even the Indian boys, who had been shooting at marks, turned their arrows on the whites. Seven Texans were killed, and thirty-five Indians.

San Antonio is the largest of Texan cities, and in most respects is modern, but it still has an old Mexican quarter where the narrow thoroughfares are bordered by many low, flat-roofed adobe buildings with waterspouts jutting out over the street. The sound of the army bugle is a familiar one to the people, for several thousands of Uncle Sam's soldiers are frequently stationed at Fort Sam Houston, which occupies the most prominent elevation in the place. The soldiers' day begins at sunrise, when a morning gun is fired. Then follows the lively music of the Reveille, to which the soldiers have set these words:

"I can't get 'em up, I can't get 'em up,
I can't get 'em up in the morning,
I can't get 'em up to-day."

The hours that follow are filled with drills, sham battles, target practice, and other occupations until sunset, when the band plays "The Star Spangled Banner," and the flag is lowered from its staff.

The city has many little parks, and on its borders is one larger than New York's Central Park. This extends over hill and dale almost in its virgin forest state, and in it roam buffalo, elk, and deer. Aquatic birds abound, wild songsters fill the air with their melody, and live oaks festooned with Spanish moss frequently shade the driveways and the river that winds through the park. Within six miles of the city are four old Spanish missions.

About seven weeks after the slaughter at the Alamo, Santa Anna, who had been raiding through the country eastward, was surprised a few miles from the present city of Houston by a force only half the size of his own. In eighteen minutes the Mexicans were completely routed. Upward of six hundred were killed, and the next day Santa Anna was captured. Only two Texans were slain. This was the Battle of San Jacinto. The battlefield is now a beautiful park and playground. Sam Houston, who had recently been elected president of the infant republic, was the leader of the Texans in the affray, and the city which was founded that summer near by was named in his honor. For two years it served as capital, and then the government archives were loaded on wagons and hauled one hundred and fifty miles to Austin. Houston is the greatest cotton market in the world. It handles twenty per cent of the entire crop produced in the United States. A fifty-mile ship canal connects it with the Gulf.

When Austin was selected for the capital it was a village of a few cabins at almost the extreme limit of settlement. The one-story frame building erected for a Capitol was encompassed by a stockade to protect it from raiding savages.

An ordinary double log house at the corner of Congress and 8th streets served as the office of three successive presidents of the republic, and of several governors after Texas became a state. The present Capitol, of red granite completed in 1888, is the largest in the United States except that at Washington. When the contract was made for its erection Texas possessed much land, but little money, and a Chicago syndicate was given 3,000,000 acres of land in or near the Panhandle for the job, which required on the part of the builders not much more outlay in dollars than the number of acres they received. The state believed it had made a good bargain, but the syndicate, by developing the supposedly arid land, realized an enormous profit.

About a hundred miles west of San Antonio is the city of Uvalde, in a region where beekeeping is so important that more honey is shipped from that place than from any other place in the United States. North of Uvalde, a few score miles, in Kerr County, is Camp Verde, an historic frontier post founded in 1855. Here the government tried the experiment of establishing a camel camp. The camels were to carry dispatches, and follow Indians in the arid desert country of western Texas. But Camp Verde is in a rocky section quite unsuited to the camels' soft feet, and the experiment was soon abandoned.

The Capitol at Austin

El Paso is the only large city in the southern part of the country between San Antonio and Los

Angeles. It is one of the main gateways of Mexico, and stands at the crossing of several of the oldest highways established by white men on this continent. The climate is on the whole delightful. Its worst feature is an occasional alkaline sandstorm which sweeps down over the city. In this far western nook of Texas, is El Capitan, 9020 feet high, the loftiest mountain in the state.

In descending the Rio Grande from El Paso the first really important city is Eagle Pass. Some of the scenery on the

The Rio Grande at Eagle Pass

way has great beauty. Specially worthy of mention is the canyon where the turbid Pecos approaches the Rio Grande between rock walls several hundred feet deep. Down near the mouth of the Rio Grande is Brownsville. The place has only had a railroad since 1905, and the region is in many ways characteristically Mexican. Almost everything thrives in the subtropical climate there. The fruits grown include bananas, oranges, lemons, figs, and prunes. Even in midwinter the natives are luxuriating in such delicacies as green peas and strawberries from their own gardens.

Somewhat more than a hundred miles up the coast is Corpus Christi, a popular resort for both winter and summer. It is on a beautiful bay, has a delightful climate, and claims to be unequaled for sea bathing, fishing, and boating.

A Rustic Home

In 1685 La Salle, the famous French explorer, established a colony on the Lavaca River near where it enters Matagorda Bay. Two years later, when, out of the two hundred who landed only forty-five had survived, he set forth to get assistance from Canada. He had not gone far when some of his little party organized a mutiny and shot him from an ambuscade. They and all the others except two perished before any chance offered to return to Europe.

Just after the war of 1812 ended, Jean Lafitte, the "Pirate of the Gulf," built a fort on the site of the city of Galveston, and a flourishing town grew up in which his own house, appropriately painted red, was the most conspicuous building. By his men he was known as the "Lord of Galveston." In 1821 the United States sent an expedition to break up the nest of pirates, and Lafitte sailed away in his favorite vessel, the *Pride*, which mounted fourteen guns. He never returned, and a few years later died in Yucatan. September 8, 1900, a tidal wave that accompanied a hurricane almost destroyed the place, costing directly or indirectly the lives of about seven thousand people. But the city was promptly rebuilt, and a great future seems assured. On the outer side of the island that the city occupies, an immense sea wall five and one half miles long has been constructed to prevent the recurrence of such a catastrophe. The wall is seventeen feet high, and

Rice Ready for Harvesting

rests on piles driven forty-four feet deep. On the seaward side is a splendid beach, smooth and hard, and thirty miles long. This affords excellent motoring, driving, and walking. The general level of the city, which formerly was little above the bay, has been raised ten feet. Galveston has a notably fine harbor, and its commerce is only exceeded in value on our continent by that of New York. Its streets are lined with palms, and these graceful trees adorn many of the yards.

Beaumont is the leading lumber town of the state, but is best known because of the tremendous excitement caused by the discovery of remarkable gushing oil wells at Spindle Top, four miles to the south, in 1901. The original well began to flow at the rate of 70,000 barrels a day. Many hundreds of wells were put down in the region around, but the entire Spindle Top Pool proved to be under an area of about two hundred acres. Sour Lake, not far distant, which rivaled Beaumont in flooding the region with oil, has a quaint woodland setting that adds much to its interest.

Rice is becoming the chief product on the Texan coastal prairies. Between Beaumont and Houston the traveler sees it on either side of the railroads growing in many great level irrigated fields. No other grain fills so important a place in feeding the world, and we fall far short of raising enough to supply the demand in our country.

A third of the population of the state is found within one hundred miles of Dallas. Here is the rich territory known as the "Black Waxy Belt," and King Cotton is supreme. The "Texas snow" is seen in great mounds on every hand

when the cotton bolls burst and the picking has begun. The present prosperity of Dallas dates from the coming of the railroads after 1870. Thirty miles distant is its twin city, Fort Worth, which in the early days developed into a great market for buffalo hides and meat. More than 200,000 buffalo hides were received there in a single season. The last buffalo in the Southwest disappeared about 1876. Fort Worth has become a manufacturing center, and a notable cattle, horse, and mule market.

The section of the state known as the Panhandle is mostly table-land nearly four thousand feet above the sea level. Whole counties in it are without a river or a watercourse of any kind. Prairie dogs, gophers, and jack rabbits abound. Large parties of men have been organized to round up the jack rabbits, and have exterminated them in great numbers. The prairie dogs are troublesome because, like the jack rabbits, they devour the grass, and besides they dig up the earth, leaving huge mounds of almost barren sand, often acres in extent. Some of their villages have a population of ten thousand to the square mile. Poison squads are now employed by the big ranchmen to depopulate the dog towns. The most picturesque feature of the Panhandle is the Palo Duro Canyon in Armstrong County. This is strangely sculptured by the torrents of the rainy season. It has a depth of over eight hundred feet in places, and is wonderfully impressive in its wild grandeur and abysmal solitude.

On the Borders of the Spindle Top Oil Field

In western Texas,

and extending into New Mexico, is the region known as the Staked Plain. It is the eastern part of what was formerly designated the Great American Desert. The mission fathers who crossed this arid plain in their peregrinations

set up stakes with buffalo skulls on them to mark their route for others, and this gave the plateau its name. It is grazing land that supports considerable herds of cattle, sheep, goats, horses, and mules, but human beings are infrequent. Texas leads all the states in cattle raising. For

some years after the Civil War, cattle by the million covered its plains, and a trail was opened to allow them to pasture in the summer to the northward, even as far as Montana and the Dakotas. They passed back and forth over the same trail that the buffalo had used for centuries. The Texans have the popular nickname of "Beef-heads" because the raising of cattle employs so many of them. Texas is an Indian word which means tribe.

Wild Turkeys

XXXV

Oklahoma

For the traveler the attraction of Oklahoma consists largely in its newness, and in the pleasure of observing the progress that has been made in the short time since it became a white man's land. Wherever you go, the wonder is to find so much accomplished and such numbers of people and large towns where were only prairie and Indians a few years ago. The state's larger communities are populous modern cities, and a surprisingly vast amount of land has been subdued for agricultural purposes. Among the inhabitants of the state are fifty thousand Indians, and for each of them an inalienable homestead of one hundred and sixty acres has been reserved. Amid the tides of civilization flowing around them and the busy thrift of the whites, they seem incongruous, and at a loss to make the transition from the savage freedom of their fathers to the workaday necessities of the present. As a rule they rent their land to white cultivators. Not many years ago they were the only inhabitants, for nearly all the area of the present state consisted of Indian reservations and

A Coyote, Wichita National Forest

was called Indian Territory. As our country became more and more settled it was found that this Indian Territory had great resources. The government had pledged its faith that no white settlers would be allowed to occupy the reservations. But, by 1800, violators of the laws against such encroachment were causing much disturbance. The "boomers," as they were called, knew the value of the land, and repeatedly marched in from the Kansas border. However, they were steadily repulsed by the United States officials, sometimes with the aid of troops. In 1889, after some dickering with the Indians, the right was acquired to throw a considerable section of the country open to the whites. At noon on April 22 the signal was given, and no less than twenty thousand adventurers and homeseekers, who had collected along the borders of the new lands, made a mad rush to secure the best farms and town lots. Other reservations were thrown open to settlement in the same way from time to time afterward. The development of the "Boomers'

"Grand Rapids," Platt National Park

Paradise," as Oklahoma is popularly called, into a flourishing agricultural and cattle-breeding district has since been phenomenal. In 1907 it became a state. The first legislature met at Guthrie, but the capital was soon afterward established at Oklahoma City. The latter is the largest place in the state. Not far away is Shawnee with its Kickapoo bark lodges.

Near the southern boundary of the state is the Platt National Park, which contains many sulphur and other springs that have medicinal properties. The highest spot in Oklahoma is at the far western boundary line, 4750 feet. The name of the state is Cherokee for the "Home of the Red Men."

Granite Bowlders on Mt. Scott.

Among the Great Level Fields

XXXVI

Kansas

The dwellers on the Atlantic coast are apt to think of Kansas as being in the far West. Really it is just halfway between the Atlantic and Pacific, and it is also just halfway between the northern and southern boundaries of our country, so that it is the most central state in the Union. It measures more than four hundred miles east and west and is half that wide. This gives it an area greater than the combined areas of the two states of Ohio and Kentucky. It is on the Great Plains that sweep gently upward to the foothills of the Rocky Mountains. In its eastern part the rainfall is ample, so that nearly all the land is farmed, but as you go farther west the climate becomes increasingly arid, and farms give way to scattered cattle ranches, except where irrigation is practicable. Streams and groves of trees are numerous in the eastern part, but the watercourses in the western part are fewer and smaller, and many of them are dry in summer, while the principal trees are cottonwoods which grow in some of the moister valleys. The surface, on the whole, is a gently rolling prairie rising from a height of seven hundred

and fifty feet on the extreme eastern edge to about four thousand feet on the western boundary. There are no eminences rising more than five hundred feet above the general level. In the southeastern corner, just south of the Arkansas River, is a stretch of shifting sand-dunes several miles wide, and one hundred miles long.

The state has comparatively little scenic attraction, except the pastoral charm always associated with rich-soiled, well-cultivated farmlands. This agricultural charm is nearly universal, but is most pronounced in the eastern part, where one finds a repose and a humanized touch in the landscape that is conferred by a longer association with mankind delving in the soil and making permanent homes. Besides, this eastern section has seen a stirring past, and the traveler finds satisfaction in recalling the wild incidents of the anti-slavery struggle and of the Civil War in the vicinity where those events occurred.

The whites first established themselves on Kansas soil when Fort Leavenworth was erected in 1827. Emigrant trains on the way to California traversed the region as early as 1844. Ten years later the population was estimated at seven hundred, mainly congregated about the military stations, the trading posts, and the half dozen Indian mission schools. Gradually the Indians were bargained out of the way, and partisans of the North and South hurried thither, each faction eager to control the destiny of Kansas in the matter of slavery. The migration was a strange mingling of hirelings, adventurers, blatherskites, fanatics, reformers, and patriots. Lawrence, Topeka, Osawatomie, and other towns were founded by colonies sent out by the Massachusetts Emigrants' Aid Society. Many men of Southern sympathies who dwelt in Missouri prepared to fight and vote, if need be, in Kansas.

In the pro-slavery town of Atchison, one August day, a

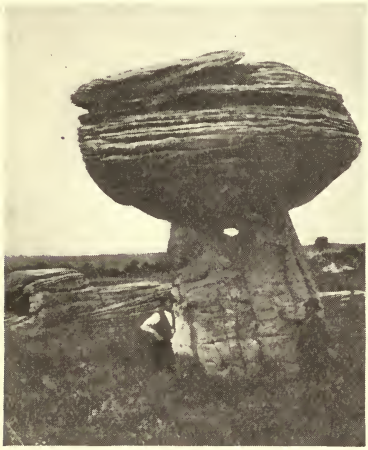
mob seized Rev. Pardee Butler, who avowed Free Soil opinions, took him to the bank of the Missouri River, blackened his face, and set him adrift with his baggage on a hastily made raft of cottonwood logs, tricked out with derisive placards. After floating five or six miles, escorted a part of the distance by citizens of the town on the bank, the voyager got to land and escaped. A few months later he returned to Atchison and fell into the hands of a company just arrived from South Carolina, who gave him a coat of tar and feathers.

The Riverside at Lawrence

In December, 1855, Lawrence was besieged by the Missourians. The siege was brought to an end by a sudden change of weather. A tremendous sleet storm extinguished the military ardor of the invaders, and they sullenly retired. Hostilities were resumed in the spring. A pro-slavery force entered Lawrence, burned two or three buildings and pillaged stores and homes.

In the autumn of 1855 John Brown reached Kansas and joined five of his sons who had settled at Osawatomie. In his opinion the time had come to strike a blow at the slave system. He and seven others made a foray on the night of May 24, and dragged five men from their cabins to sudden death at Dutch Henrys Crossing on Pottawatomie Creek. Much belligerency followed. The "Westport Sharpshooters," the "Bloomington Rifles," the "Lawrence Stubs,"

the "Blue Mound Infantry," and the "Wakarusa Boys" were all active. Palmyra was looted, and also that "Abolition Hole," Osawatomie, and some lives were sacrificed. At Leavenworth a Missouri ruffian made and won a bet of six dollars against a pair of boots that he would scalp an Abolitionist within two hours. On August 30, 1856, Osawatomie was attacked. Six free-state men were killed, and only four cabins escaped the torch. Brown went North, but returned a year later and made an expedition across the Missouri line. The raiders destroyed considerable property, liberated eleven slaves, and killed a slave owner. Brown successfully piloted the negroes northward, and Kansas saw him no more.



Pulpit Rock near Carneiro

Anarchy had subsided into a rudimental order by 1859, but with the outbreak of the Civil War there was again a rank growth of general freebooting. This culminated in Quantrell's Raid on Lawrence in the summer of 1863. Buildings were rifled and burned, and one hundred and eighty-three men of the town were killed. In the half dozen years after the war Kansas suffered from Indian hostilities in which fully a thousand citizens lost their lives. The year 1874 is one long to be remembered for its plague of locusts which desolated large districts, devouring fruits, vegetables, and grains. Even worse was the drought of 1879 and 1880, when destitute settlers went away by thousands, carried free by the railroads.

Kansas City is the largest place in the state. Topeka has been the capital ever since Kansas became a state in 1861. It is built on both sides of the Kansas River, a stream noted for its floods. In the great flood of June, 1903, the water was over seven feet deep in the Union Pacific Station at Topeka. There was great loss of life and property, and the river's course shifted in many places.

Dodge, in western Kansas, is a model of tranquillity now, but in earlier days was widely known as the "wickedest town in the country." For "all-around cussedness" it was unexcelled. It was founded in 1872, three years after the Santa Fé Railroad had begun to be built westward from Topeka. Money was plentiful, and a paper of pins, a shave, or a drink cost twenty-five cents. No smaller coin was in circulation. The town's first calaboose was a well fifteen feet deep into which drunks were lowered to stay until they sobered off. Sometimes this unique prison contained half a dozen inmates. When Dodge came into being it was in the very heart of the buffalo country. A good hunter could make $100 a day slaughtering the buffaloes. Their ancient range extended from the Alleghenies to the Rocky Mountains and completely across the United States north into Canada and south into Mexico. Early travelers in the West have seen the prairie black from horizon to horizon with the shaggy monsters.

Kansas ranks first among the states as a producer of wheat. It bears an Indian name which means "Smoky Water." People call it the "Sunflower State" because of the abundance of wild sunflowers there. The nickname for its inhabitants is "Jay Hawkers," a sobriquet applied in early times to those who carried on guerrilla warfare in the region. It attains its greatest height, 4135 feet, about midway on the western boundary.

TURTLE MTS.
Cando
Langdon
Lake of the Woods
Grafton
Park River
Williston
Minot
Devils Lake
Red Lake
Grand Forks
Crookston
NORTH DAKOTA
Hillsboro
Dickinson
Mandan
Jamestown
Fargo
Moorhead
L. Itasca
Leech Lake
BISMARCK
Valley City
Lisbon
Oakes
Wahpeton
Fergus Falls
Aberdeen
Webster
Benson
Milbank
Redfield
Watertown
SOUTH DAKOTA
Minnesota
Lead
Deadwood
Rapid City
BLACK HILLS
PIERRE
Huron
Brookings
New Ulm
Hot Springs
Chamberlain
Madison
Mitchell
Sioux Falls
Canton
Spencer
Yankton
Chadron
Niobrara
Vermilion
Sioux City
Alliance
Loup
O'Neill
Wayne
Norfolk
NEBRASKA
Ord
Blair
Omaha
Sidney
Brokenbow
North Platte
Columbus
Fremont
S. Omaha
Grand Island
Kearney
York
Plattsmouth
Missouri
Holdrege
Hastings
Lincoln
McCook
Red Cloud
Geneva
Republican
Fairbury
Beatrice
Beloit
Concordia
Atchison
Leavenworth
Kansas City
Junction City
Kansas R.
Topeka
Lawrence
Smoky Hill R.
Salina
Ottawa
KANSAS
Garden City
Emporia
Neosho R.
Hutchinson
Newton
Iola
Dodge City
Wichita
Port Scott
Cimarron R.
Independence
Winfield
Arkansas City
Coffeyville
Scale of Miles
0 25 50 100 150 200 250 300

A Spring Field

XXXVII

Nebraska

Nebraska's name is of Indian derivation, and means Shallow Water. This very accurately describes the chief river of the state — the Platte. Nebraska is popularly called the Tree-planter State, a reference to its transformation from naked prairie, which was almost universal when the whites began to settle there. The people are nicknamed "Antelopes."

In 1851 a gold-seeker, who saw more gold in paddling passengers across the murky Missouri than in washing the yellow sands of the California rivers, established a ferry at Council Bluffs. Two years later a company was organized to handle the ferry business, and laid out a town site on the Nebraska shore. The name given to the prospective town was Omaha, which was the name of a tribe of Indians that was wont to camp on a neighboring creek. On the broad plateau overlooking the river three hundred and twenty blocks were

staked out, with streets one hundred feet wide. One square on the top of the most conspicuous hill was reserved with the intention that the future State House should stand there. At this time Nebraska had no civilized inhabitants except soldiers sent to keep the Indians in order, and the missionaries and fur-traders. Nor did the population increase rapidly until the Union Pacific Railroad was begun. Omaha is the largest city in the state, and one of the chief gateways to the West. At South Omaha are great stockyards and packing-houses. Just north of the city is Fort Omaha, an important signal service, balloon, and wireless experiment station of the United States Army. Omaha was the first large city to adopt the Commission form of government. When the Mormons were preparing for their long march across the plains they established themselves in winter quarters at a point about six miles north of the present Omaha, and sheltered themselves in over seven hundred log cabins and dugouts. From there a first party of about one hundred and fifty led by Brigham Young set out on the march westward with seventy-three wagons drawn by horses and oxen in April, 1847. You find on that spot now a quaint, sleepy village, chiefly interesting for a few ancient landmarks.

Scotts Bluff and Platte River

At Omaha, on December 21, 1863, ground was broken for the construction of the Union Pacific, the first American cross-continent railroad. Its name was based on the

belief that the railroad would bind the Union together. The route it follows is the same used by the buffalo, gold seekers, pony express, and overland stage coach. It is the shortest way, and the most free from barriers. The first through train for San Francisco left Omaha in September, 1870. The railroad was sold at Omaha, on November 1, 1897, in the "world's greatest auction." It brought $57,564,932.76, which was a trifle less than half the cost of construction.

The Oregon pioneers went with the first wagons over the mountains to the Pacific in 1843. From the time that gold was discovered in California until the completion of the railroad the Overland Trail was in full tide of life. One hundred thousand travelers passed over it yearly. The Lincoln Highway, from New York to San Francisco, which is designed as a memorial to the martyr President, follows the same trail. This improved thoroughfare is 3389 miles long, and traverses thirteen states.

While the Union Pacific Railroad was being built, all the Indian tribes on the plains united their forces for the avowed purpose of exterminating the whites, and they devoted especial attention to the railroad. At first they did not know what to make of the locomotive, but they soon gained courage to try to stop a train by stretching across the track a lariat held by thirty braves on each side. This was a disastrous holdup for the red men.

Crow Butte

Near the end of the track was a community of something like three thousand persons living in tents and shacks. The town was moved forward at frequent intervals, and because of this and its general character was known as "Hell on Wheels." Aside from the railroad employees and a few storekeepers the population consisted mainly of gamblers and desperadoes and the very worst class of women. The chief article of commerce was vile whiskey.

Jail and Courthouse Rock

Omaha was the territorial capital of Nebraska, but with the investure of statehood in 1867 a seat of government was carved anew on the virgin prairie fifty miles to the southwest and christened Lincoln.

Eighty-four miles up the Platte from Omaha is Columbus. In 1864 it was urged that this place, which was then a straggling frontier settlement, be made the capital of the United States, because it was exactly halfway between the east and west coasts on the main transcontinental route. Beyond Columbus is a perfectly straight stretch of railroad track for forty miles.

A Sod House in the Sandhills

Vast herds of buffalo used to cross the Platte at Grand Island on their spring and fall migrations. They abounded to such a degree that emi-

grants on the old trail often had to stop while the buffalo were crossing the road. In the days of the early pioneers an Indian would trade a buffalo robe for a cup of sugar or a yard of red flannel. As recently as 1872, Grand Duke Alexis of Russia, with "Buffalo Bill" and Generals Custer and Sheridan, started in chase of buffalo from Willow Island, which is beside the Platte halfway across the state.

In the western part of Nebraska is a considerable strip of desert full of rocky pinnacles and rich in fossil remains, but as a whole the state is a rich farming region, where wheat, alfalfa, and corn all flourish. Much the same scenes and the same charm of agricultural prosperity exist in the three neighboring states of Iowa, Missouri, and Kansas, which with Nebraska constitute the nation's "big four" from the farm point of view. The highest spot in Nebraska is in the southwestern corner, 5350 feet.

State House, Pierre

XXXVIII

South Dakota

South Dakota is one quarter larger than all New England. Its principal crops are corn and wheat. Cattle raising is an important industry. Thousands of cattle subsist through the entire winter without shelter, and without food other than the prairie grass, which cures into good hay while standing, and affords excellent grazing the year round.

The first authentic exploration in the region was done by the Lewis and Clark expedition in 1804. An American Fur Company steamboat which ascended the Missouri in 1832 had among its passengers the well-known painter and ethnologist, George Catlin. The Fur Company founded Fort Pierre, and Catlin spent several weeks at the fort studying the manners and customs of the Indians. The present-day city of Pierre is the capital of the state. Several small settlements were made east of the Missouri about 1860, but their growth was much hampered by the Civil War and by Indians. The state's most populous city is Sioux

Falls, which derives large water power from the Big Sioux River and has extensive flour mills.

In the southwestern part of the state is the noted health resort of Hot Springs. The springs, which number nearly one hundred, were a favorite resort of the aborigines. Now they draw to them the modern Indians and hosts of whites. A dozen miles north is Wind Cave National Park, sixteen square miles of pine-covered hills. The cavern, which is the park's special attraction, was discovered in 1881. It has recesses that have been traced for ninety-six miles. Its name is derived from the strong air currents at the entrance, which sometimes blow outward and sometimes inward. Bridges and stairways and paths through the mysterious passages permit visitors to view the cave's splendors. Some of its passages are five hundred feet below the surface, and they wind about over and under each other very curiously. The temperature at no time rises above forty-seven degrees or falls below forty degrees. The park is the permanent home of a herd of buffalo. Other animals such as elk, antelope, and deer are to be seen there also. Somewhat to the east of this section, between the head waters of the White and Cheyenne rivers, are the fa-

Pulpit, Big Bad Lands

mous Bad Lands — giant, deeply worn masses of bare rock and clay destitute of vegetation.

South Dakota is called the "Coyote State." It has also been called the "Blizzard State." The blizzards, which are storms of fine snow driven by the north wind, used to frighten the first settlers; but now that the roads are well marked they have lost their terror. As a matter of fact they are infrequent.

Wind Cave and Hot Springs are on the borders of the Black Hills, which are probably the most interesting portion of the state. These Hills are an outlying group of the Rockies. Their name was given them by the early settlers because the dark needles of the yellow pines make them appear black as seen from a distance. The region round about for hundreds of miles is a monotonous rolling country that offers a striking contrast to this medley of craggy uplifts and irregular valleys. Harney Peak, the monarch of the Black Hills group and the loftiest elevation in the state, attains a height of 7242 feet. It is easily reached by trail from the attractive summer resort of Sylvan Lake, three miles distant. Sylvan Lake is only five miles north of Custer, and twelve miles west of Custer is Jewel Cave, a limestone cavern of considerable extent and much beauty. On the

Panning for Gold

slopes and mountains of the Black Hills grow forests of pine, and in the vales are pasturage and occasional cultivated fields and rude farmhouses. The discovery of gold in the Black Hills is usually attributed to a government exploring expedition which spent the summer of 1874 in the region; but even at that time a good many prospectors were roaming around there entirely independent of the troops. The prospectors found gold, and so did the troops, and both told stories of wealth in the Hills that promptly brought a rush of the floating population of the frontier and of numerous other fortune seekers from the older Eastern states. The fact that they would be trespassers on the choicest hunting ground belonging to the Sioux Indians was no serious deterrent either as a matter of justice or of danger. Efforts on the part of the government to keep the miners out met with little success, and the difficulty was finally solved, two years later, by the purchase of the tract from the Indians. The big strike of gold at Deadwood was made that year, toward the end of winter while there was still snow on the ground. Custer was then the big town in the Black Hills. There were 1400 buildings in the place; yet almost in a night it was depopulated. Only fourteen persons remained in the town.

The Black Hills at Deadwood

The placer mines of Deadwood Gulch and the tributary ravines were very remunerative for a short time, and the town that grew up there was the metropolis of the Black Hills. Its situation is particularly piquant and interesting. The homes cling along the steep declivities of the gulch, and creep far up every side ravine. In the depths of the hollow are the railroads and a swift muddy creek, business blocks, mines, shops, and other buildings all jumbled together, and entirely lacking elbowroom. Round about rise lofty wooded ridges with here and there a perpendicular or rock-crowned hilltop. In the city cemetery, high on the terrace of a bluff, are two brownstone monuments that have a peculiar interest. Each is a full-length statue of an early celebrity, and each is protected by an inclosing coop of chicken wire fencing from the affection of those who would like to chip off mementos. One is of a minister who was killed by Indians while on his way to preach at a neighboring village. He knew the danger, yet duty called and he took the risk, and now he is one of the Black Hills saints. The other statue is of a still more popular hero — "Wild Bill." He served as a scout in the Civil War, and later in the same capacity on the plains. There was no fear in his make-up, but he well knew that he had enemies, and he took the precaution, whenever he sat down indoors, to place himself with his back to the wall. This did not save him from a violent end, for while on a visit to the region he was shot dead as he was playing in a gambling place. His statue represents a bareheaded, long-haired plainsman, holding a pistol in one hand and about to draw another from his cartridge belt. The pupils of his eyes are painted blue.

The Black Hills country has been characterized as "the richest hundred miles square on earth." But its only really notable mine is the great "Homestake" near Deadwood. A few miles to the north, at Spearfish, is a canyon which rivals those of the Colorado.

Village Cows Starting for Pasture, James River Valley

XXXIX

North Dakota

The first settlement in the "Great Cereal State," as North Dakota is called, was made about 1780 in the extreme northeast corner at Pembina by Canadians. Thirty years later a fort was built there by the British, who thought the spot was in their own territory. The Red River of the North forms the state's entire eastern boundary. Few regions in the world are more fertile than this, and the rich black soil which extends in almost unbroken regularity across the valley is under a high state of cultivation. Ages ago the great glacier that overspread the northern part of the continent dammed the valley so that the river could not flow in its natural channel to the Arctic Ocean. A lake was formed which was larger than all the present Great Lakes put together. After the ice had melted entirely from the valley, the river flowed again northward, and the lake disappeared. The soil of the wheat region is the sediment of this ancient lake. A few years ago wheat nearly monopolized

the Red River Valley, but now the crops are more diversified, and instead of an unbroken stand of wheat stretching to the horizon there are other grains and flax interspersed. One North Dakota farm in this valley contains over 30,000 acres. It is divided into six parts, with farm buildings on each. In the planting season one hundred and twenty men and three hundred horses are employed, and nearly as many in the harvesting. It is no infrequent sight on the "Bonanza" farms to see a row of twenty or more plows, harrows, seeders, or reapers working at the same time. Continuous furrows may be plowed for miles in a straight line. The wheat harvest begins about August 1, when the enormous fields of yellow grain are exceptionally beautiful.

Another section with superlative fertility and productiveness is that around what is known as "Jimtown" in the "Jim" River Valley, but which you will find on the map as Jamestown.

The state, as the white men found it, consisted of one vast open range, which furnished grazing in abundance for the herds of wild animals that roamed over it. During a considerable period afterward the region was considered only suitable for the pasturage of cattle, horses, and sheep, as the annual rainfall seemed too small for raising crops. The discovery that by proper methods of cultivation most of the moisture in the soil could be conserved and rendered available

A Farmyard

for agriculture, has resulted in the fencing and farming of nearly all the land.

The Battleship, Pyramid Park

The last of the Dakota bison were killed by Indians in 1883. Twenty years later there were only thirty-four wild bison in the United States, but in parks there were nine hundred and sixty-nine. It is estimated that before 1890 the bones of 7,000,000 buffalo were shipped for fertilizer from North Dakota alone.

One of North Dakota's beauty spots is Sullys Hill National Park, which has an area of seven hundred and eighty acres in the northeastern part of the state on the shore of Devils Lake near Fort Totten. The lake is fifty miles long and from two to eight miles wide. It affords a good bathing beach and excellent opportunities for yachting, and there is much charm in its woods and rugged hills.

Fargo, the state's largest place, is a busy grain-trading city on the west bank of the Red River. Bismarck, the capital, was settled in 1873. It has about as great a variation of temperature as any location in the country. In summer the thermometer occasionally registers over one hundred degrees and in winter it sometimes goes more than forty degrees below zero. In the sparsely settled district farther west large numbers of prairie dogs may be seen. At Belfield begin the "Bad Lands," a name that refers to the difficulty of travel there and not to the soil, which affords excellent grazing. Another name for the region is Pyramid Park.

Steep many-tinted buttes carved by wind, frost, and rain rise from the plain in all directions and have many fantastic shapes and greatly variegated coloring. The most elevated point in the state is in Bowman County in the southwestern corner, 3500 feet high.

Dakota is an Indian word. It means allied, and refers to a great confederation of tribes that inhabited this section of the country. The people of North Dakota are nicknamed "Sioux."

Blackfeet Camp on Two Medicine Lake

XL

Montana

Montana is the third largest state in the Union. It has a Spanish name which means Mountain Land. The name fairly describes it, and hence its popular name of "Stub-toe State" seems appropriate. Its highest mountain is Granite Peak in the southern part not far from the Wyoming line, with an altitude of 12,850 feet. Soon after passing Billings, on a clear day, the traveler, going west on the Northern Pacific Railroad, gets his first glimpse of the Rocky Mountains, or "Shining Mountains" as they used to be called in the early descriptions. They are directly ahead, nearly one hundred miles away.

Within a few years after Lewis and Clark made their famous expedition across the continent, fur companies established trading posts on various rivers in what is now Montana. The most important of these posts was Fort

Benton at the head of navigation on the Missouri. This came into being in 1846.

Gold was first discovered in Montana on a small creek west of the main divide of the Rocky Mountains about forty miles from Helena in 1852, near the present town of Deer Lodge. The first mine was opened in 1861. Helena, the capital, sprang into existence as the result of finding extraordinarily rich gold-bearing placers where the city now stands. A party of four prospectors who had gone west over the adjacent Continental Divide had turned back after a season's fruitless effort. They decided to make a final attempt to discover gold on a small creek, where some indications of precious metal had been discovered on the outward journey. As one of them expressed it, "That little gulch on the Prickly Pear is our last chance." Thus the place became known to the party as Last Chance Gulch before the actual finding of gold in paying quantities that midsummer of 1864. The news of the discovery spread far and wide, and a town came into being which grew with the rapidity characteristic of placer camps. At first the chief overland transportation route was the Missouri River, by which steamers could reach Fort Benton during high water. But the period

Lake McDonald

of high water did not last much more than a month, and steamers were often forced to stop at the mouth of the Yellowstone four hundred and fifty miles distant. In 1883 the Northern Pacific Railroad was completed to Helena. The arrival of the first regular train on July 4 was the occasion of a great celebration, and on that day the first "bullion train" departed carrying 1,000,000 pounds of silver from Montana's mines. Helena now ranks among the wealthiest

Seeley Lake

cities of its size in the world. Gold to the value of $40,000,000 has been taken from Last Chance Gulch, which runs through the city.

The same year that gold brought Helena into being it put Butte on the map. It was discovered near Butte's present Main Street, and a great deal of the precious metal was taken out by placer mining in the next few years. Later the district became a large producer of silver. The railroad arrived in 1881, and then the copper industry developed rapidly at Butte. For a time the smelting was all done near the city, but presently there was constructed at Anaconda,

twenty-seven miles away, a plant which has become one of the largest copper smelters in existence. The Butte district is unrivaled in its total output of copper, and a large part of this copper has come from an area of only a few square miles. So far as value is concerned, Butte's metalliferous area has been the most productive of its size on the globe, and the city boasts with reason that it is the greatest of all mining camps. When the smelters were pouring out their destructive fumes there was not a spear of grass nor a green leaf visible in the vicinity, but now that most of the ore is smelted at a distance the valley is recovering some of its vegetation. Great shaft buildings and tall smokestacks rise from the mouths of the copper mines in and about the town, and the rocks underground are honeycombed with workings, some of which reach a depth of three thousand feet, and in which labor goes on day and night without cessation. West of the city is the conical hill, Big Butte, from which the place derives its name.

Ranger on Mt. Silcox

Montana can be seen in a very different aspect in the Gallatin Valley, fifty miles to the east, in the very heart of the Rocky Mountains. This valley is known as the "Garden Spot" of the state. It is about thirty miles long and fifteen broad. Much of it is as level as a floor, but along the borders are big softly rounded hills with a back-

Missoula National Forest

ground of impressive mountain ranges. The soil is justly celebrated for its fertility, and prosperity is general. Many of the farmers stay on their farms only during the season that the crops need attention, and spend the winter in homes that they own "in town," which usually means Bozeman, the metropolis of the valley. Bozeman, however, is not much more than a snug country village, embowered in trees, and quite suggestive of sociable serenity. On the uplands a good deal of "dry farming" is done, and excellent crops are produced where formerly only grazing was deemed possible. Dry farming does not mean that crops can be raised in soil devoid of moisture, but that by proper treatment the soil is made to conserve its moisture for crop nourishment instead of giving it off into the air. The land is plowed in the spring. Then it is thoroughly disked and harrowed, and after every rain it is harrowed again. By keeping the surface pulver-

Emigrant Peak

Nine Pipe Reservoir and Mission Range

ized a sort of blanket is formed which prevents the moisture from escaping. Finally wheat is sown, and the land then takes care of itself until harvest time.

In this vicinity the Missouri River has its source. After flowing five hundred miles and gathering to itself the waters of many tributaries it makes the vertical plunge of sixty feet known as Black Eagle Falls. Four miles farther down is Rainbow Falls, where the thousand foot breadth of river drops fifty feet. Another mile takes you to Crooked Falls, and a few miles more to Great Falls, where, after preliminary rapids between soaring precipices, the river makes a sudden magnificent leap of ninety feet down into gulfs of gray mist. In a distance of sixteen miles it descends four hundred feet. Near Rainbow Falls is the Great Spring Fall, formed by a spring bursting from the bank of the river twenty feet above the channel. At the head of navigation on the Missouri is Benton. The only remains of the old fort that stood there in the fur-trading and gold-rush days are a little square adobe blockhouse and a few crumbling walls. Some interesting features farther down the river are Sentinel Rock, a conical shaft that rises from the stream to a height of three hundred feet; Elbow Rapids, at the base of the great Hole-in-the-Wall Rock; and the turbulent and rocky Dead Man's Rapids.

In northern Montana is the last of the open range. It includes a tract that extends three hundred miles from North

Dakota to Fort Benton and one hundred and fifty miles from Canada down nearly to the Yellowstone River. The area is greater than that of the combined states of Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island. The single county of Dawson, which is in this tract, is bigger than the state of Maryland; but while Maryland has 2,000,000 people, Dawson County has less than 3000. Settlers steered clear of these vast northern plains, which were believed to be too arid for farming. The plains, however, had on them an abundance of wild grass that not only supplied rich grazing in summer, but standing hay, cured by nature, which sustained cattle on the range in winter. It was not considered necessary to provide shelter for the stock until many cattle perished in the severe winter of 1881. That year snow blocked the roads for weeks at a time, and the thermometer registed fifty-nine degrees below zero at Fort Benton.

Many sheep are fed on the range. There are 25,000 to 40,000 head on a good-sized ranch. One man with a dog can herd 2500 when they are grazing. He selects a spot

Great Falls of the Missouri

Hole-in-the-Wall Rock

near water for a camp, and drives his sheep out each morning two or three miles and back at night. When the grass is eaten in one vicinity the camp is moved. The life of the herder is very lonely. Once a week a man brings him food, but otherwise the herder has no companions except his sheep and his dog, and perhaps a horse. One of the first things a sheep ranchman does after the winter is over is to sell the skins of the sheep which have died during the cold weather. He expects to lose an average of five per cent of his flock each winter. Shearing is usually done in June. Men who make this their business travel in squads of about twenty-five. They erect sheds and pens near some railway town and shear all the sheep that are brought to them. Some ranchmen have their sheep sheared on the ranch, but the other arrangement is very satisfactory because it saves the expense of hauling the wool to the railway station. The sheep graze as they go and come, and fare about as well as if they were on the range.

In the western part of the state is the reservation of the Flathead Indians, a peaceful tribe whose boast is that they

Threshing Wheat

have never killed a white man. From the railroad that follows the Jocko River their huts and tepees can be seen close at hand.

Somewhat farther south is the Bitter Root National Forest of more than 4,000,000 acres. It is the wildest, shaggiest block of woodland in the Rocky Mountains, full of vigorous, storm-loving trees, full of dancing, singing streams, and full of big game and innumerable lesser creatures. When an

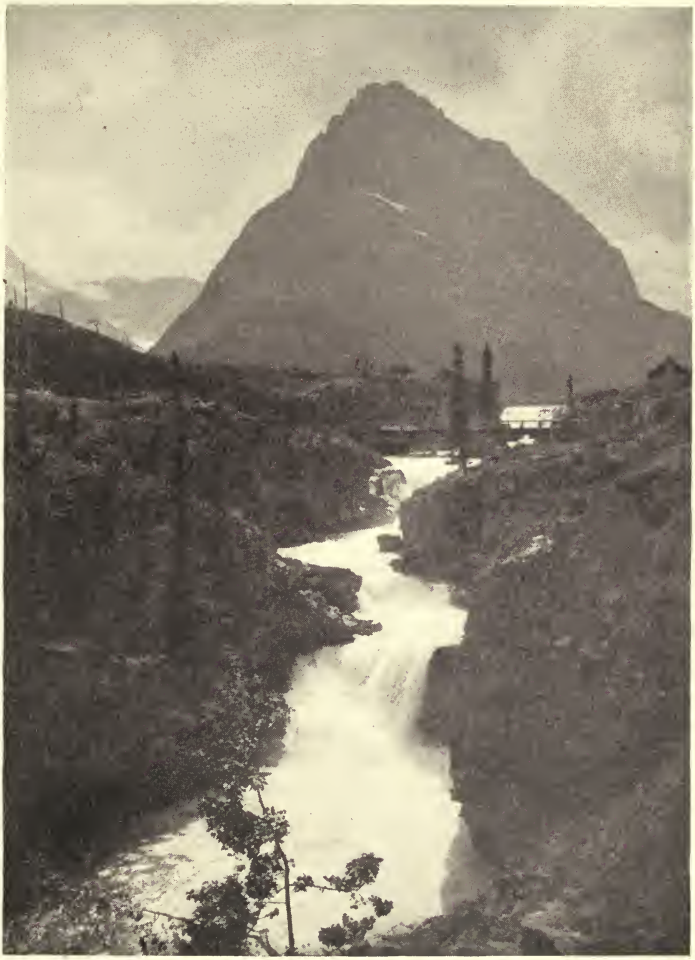
A Round-up Outfit

excursion into the National Forests of the West is proposed people imagine all sorts of dangers — snakes, bears, Indians. Really the snake danger is so slight it is hardly worth considering. Bears mind their own business instead of going about seeking whom they may devour. They have been poisoned, trapped, and shot at until they have lost confidence in man, and it is not easy now to make their acquaintance. As for Indians, most of them are dead or civilized into useless innocence.

Adjoining the Canadian line and inclosing the Continental Divide of the Rocky Mountains in that region is Glacier National Park, extending sixty miles north and south and forty the other way. It is a tract of snow-crested mountains, ice-filled ravines, lakes and streams, and Alpine meadows.

Formerly it was the range of the hunting and warring Blackfeet Indians, who there pursued the antelope, mountain goats and sheep, moose, bear, and buffalo; and this abounding game made them the envy of all the neighboring tribes of upland and prairie. The first white man to see the mountains of Glacier Park was a youth of seventeen who had been commissioned by the Hudson Bay Company to establish trade relations with the Blackfeet hunters. He came from the north in 1815, took up his abode with the Blackfeet, married one of their maidens, and was given the name Rising Wolf, which refers to the fact that the Indians found he always appeared to be listening and alert while he slept, and if suddenly awakened he "got up quick on his hands like a wolf." No other white man entered the domain, except a missionary in 1846, until 1869. During the next twenty years its attractions aroused increasing interest, and a good deal of exploring was done by enthusiasts. In 1890 copper was found there, and the district was invaded by a rush of prospectors. To open it for mining purposes the government bought the land from the Indians, who moved to a reservation east of it where they now breed cattle and cultivate irrigated farms. Not enough copper was found to make mining profitable, and the prospectors left. About this time the Great Northern Railroad came to the vicinity, and sportsmen and sightseers began to resort to it. Presently a campaign was started to make this a vacation reserve for the nation, and in 1910 the effort was crowned with success.

The chief entrance is the eastern one, where there is a massive rustic hotel at the Glacier Park Railroad station. The long exterior galleries of the hotel are supported by huge tree trunks processed so that their bark is retained. None of them is less than six feet in diameter. The most notable feature of the interior is the Forest Lobby, where splendid fir tree pillars four feet thick rise to a skylight set



MT. GRINNELL AND MCDERMOTT FALLS

in the roof. Another unique attraction is the open camp fire on the lobby floor. Pine sticks merrily crackle on a great slab of stone in the evenings, and around the fire gather tourists, dignified Blackfeet chiefs, and weather-beaten guides.

The auto-stage highway that goes into the park here follows the old Rocky Mountain Trail that was for centuries the north and south travel route of the Indians, and which extended into South America.

In the heart of the park are nearly a dozen groups of lodges within a day's walk of one another to serve as touring bases. Stages and launches, saddle horses, and guides assist the sightseer to get around effectively. On either side of the continental ridge, which runs through the center of the park, bridle paths have been prepared linking lakes, passes, glaciers, and principal peaks to the scattered stopping places. The regular season lasts from June 15 to October 1. A traveler can see much of interest in a day's time, but a general acquaintance with the main features of the park can hardly be gained in less than a week.

The park has in it one spot known as the Triple Divide, whence waters flow away into the Pacific Ocean, Hudson Bay, and the Gulf of Mexico. It has forty peaks with an altitude of over 8000 feet, and four that are over 10,000 feet. The mountains are not of the gentle type, with flowing outlines, but rise like citadels, brusque and knurly and angular. Snow accumulates only on the gentler slopes or in the higher valleys. Where it has increased sufficiently, pressure has turned the lower parts to ice, and in such instances as the weight is sufficient this ice becomes a glacier and creeps slowly downward, flowing as if it were plastic. At a sudden descent, where a river would leap as a waterfall, a glacier breaks across in fissures that may be several feet wide and hundreds of feet long, and these crevasses go down to blue-

Iceberg Lake and the Goat's Ladder

black depths that are appalling to the inexperienced climber. As the glacier advances the crevasses are bent out of shape and may be crossed by fresh crevasses that split the ice into wild lumps and pinnacles. On such days as the sun shines warmly the ice melts, and by afternoon torrents of pale blue water are racing down over the frozen surface and here and there plunging into a crevasse. At length the water makes its way to the bottom, and then roars along through an ice tunnel to the end of the glacier.

Débris quarried by frost from the bordering mountain sides often buries the edges of the glacier, and is carried along. Blocks of rock as large as cottages are occasionally thus transported. When the mass of stony material arrives where the melting of the glacier is complete, it is piled up in a moraine. Beneath the glacier, fragments of stone frozen into the bottom of the ice gouge and scour the rocky channel and grind both themselves and the surface over which they move into the "rock flour" that makes the glacier streams so milky.

Our glaciers are now nearly all in retreat, either because the climate is growing warmer, or because the snowfall is lessening. On this account there can be seen several moraines down a valley below the one that is forming. The

nearest to the ice is almost sure to be bare; the next, a few hundred yards away, may have bushes growing on it; and others, a mile or two farther down, may be covered with ancient forest. Glaciers once filled all the Rocky Mountain valleys, and in many instances hollowed them so that now a blue lake lies within the rock rims.

Mt. Gould, Glacier Park

Glacier Park contains about ninety glaciers, ranging in size from those a few acres in extent to Blackfeet Glacier with its three square miles of ice. Not only is Blackfeet Glacier the largest, but it is one of the most accessible, and it exhibits in fine development the leading characteristics of glaciers. Taken as a whole these glaciers are particularly noteworthy for their splendid setting in the recesses of the mighty mountain ranges. The park, with its snow and ice, its picturesquely modeled peaks, its gigantic precipices, its rounded valley floors adorned with ferns and flowers and slender pines, and its romantically lovely two hundred and fifty lakes, is an American Switzerland. The lakes have one phase of alikeness — each is in a basin surrounded wholly or in part by towering rock walls. The deep vividly blue St. Mary's Lake is declared to be the most beautiful mountain lake in America. A little steamer takes tourists from

the highway ten miles to the head of the lake, where are several lofty peaks, the highest of which, as named by the Indians, is the Face-of-Sour-Spirit-Who-Went-Back-to-the-Sun-After-His-Work-was-Done. The whites have shortened this name to Going to the Sun Mountain. According to a Blackfeet legend, Sour Spirit descended from the sun a long time ago, and taught the tribe how to shoot straight with the bow and arrow, how to build comfortable tepees, and how to slaughter many buffalo at a time. Then, before returning to the sun, he chiseled the likeness of his face on the granite crest of Going to the Sun Mountain for an inspiration to the tribesmen.

The park is the haunt of the mountain goat, one of the bravest and hardiest of hoofed animals, whose expertness as a crag-climber is unsurpassed. Here also may be found in their native haunts grizzly and black bears, elk, moose, deer, and bighorn sheep. Occasionally the tracks of a

Kintla Lake

© *R. E. Marble*

Close of Day, Two Medicine Lake

mountain lion are seen. Trout abound in the lakes and streams.

At Browning, in the Blackfeet Reservation, which is just east of the park, several thousand Indians assemble early in July for an annual reunion. They put up their tepees in a great oval camp beside Willow Creek, and go through many old-time ceremonies that are very curious and fascinating. The names of some of their present-day leaders are Little Dog, Bear Chief, Jack Big Moon, White Quiver, and Crow Eyes.

In southern Montana, not far from what is now the village of the Crow Agency, occurred the encounter between the gallant Custer and the Indians late in June, 1876. Few events in the great Northwest have been more tragic and melancholy. Not one of the whites survived to tell the story, and all we have learned of the details, except what the

Flathead River

battlefield itself disclosed, has come from the hostile red men. Through the lowlands flows the winding, tree-fringed Little Bighorn River, and between the Agency and the battlefield, three miles distant, is a level stretch of pasturage. Then you come to hills rising in a long and often steep sweep to a high ridge that overlooks all the country for miles around. Along this ridge the battle was fought. It is a dreary spot, entirely devoid of trees or other marked features. The soil is full of small stones scantily hidden by growths of sagebrush, prickly pear, and tufts of coarse grass. For a mile along the hillcrest is a scattering of white gravestones, each marking the spot where a soldier's body was found. Some of these occur in groups, others singly; and they are a pathetic indication of the fierce struggle of the troops to defend and disentangle themselves from the fierce clutch of their savage enemies. Occasional stones are

St. Mary's Lake

Mt. Cleveland

far down among the steep-sided coulees that furrow the rough slope, as if the men had made sorties in order to reach the river. No water was to be had nearer, and the lack of it was a serious handicap. The last stand was made just under the western brow of the extreme north end of the ridge where it rises highest, a cool windy spot usually, but on a still summer day baking hot. Opposite this height, on the other shore of the river, the Indians had their encampments straggling along for two miles or more. Each party was in plain view of the other, and at all times knew its opponents' movements and condition. Custer fell in the midst of his men, and a wooden cross marks the location where his body was found. This rude memorial seems not altogether appropriate, but nothing is safe from the rapacity of the relic-hunters, and when they have destroyed one cross by carrying it off a splinter at a

Bowman Lake

time, another can be set up in its place. Custer had to deal with nearly 3000 Sioux warriors, including boys who were armed with bows and arrows. When he came to grips with the enemy toward noon that June day he had about two hundred and fifty men with him. The fight lasted only a few hours, and then the Indians shouted and reveled on the battlefield, scalping and plundering the dead soldiers; and the young men and boys rode about firing into the bodies. When darkness came they lighted bonfires in their encampments, and all night long were engaged in frantic rejoicing, beating drums, dancing, yelling, and discharging firearms.

Lethbridge
Nelson
Rossland
Kootenai R.
Clark Fk.
Pend d'Oreille L.
Kalispell
Flathead L.
Coeur d'Alene
Spokane R.
Marais R.
Havre
Milk R.
Glasgow
Missouri R.
N. DAKOTA
Fort Benton
Great Falls
Wallace
Missoula
Belt
Lewistown
Glendive
Yellowstone R.
BISMARCK
Moscow
Lewiston
Orofino
HELENA
MONTANA
Butte
Anaconda
Bozeman
Billings
Miles City
Little Missouri R.
Grangeville
Salmon R.
Dillon
Livingston
Red Lodge
Sheridan
Deadwood
PIERRE
Weiser R.
Payette R.
Salmon
YELLOWSTONE NATIONAL PARK
Big Horn Mts.
Buffalo
Newcastle
BLACK HILLS
S. DAKOTA
IDAHO
Caldwell
BOISE
Rexburg
Cody
Big Horn R.
Powder R.
Cheyenne R.
Nampa
Idaho Falls
Fremont Peak
WYOMING
Silver City
Shoshone
Pocatello
Lander
North Platte R.
Douglas
Casper
Shoshone Falls
Snake R.
Twin Falls
Malad City
Montpelier
Preston
Wind River Peak
Wind River Mts.
Wheatland
NEBRASKA
Platte R.
Laramie R.
Logan
Brigham
Rock Springs
Rawlins
Hanna
Laramie
Wells
Great Salt Lake
Ogden
Evanston
Green River
CHEYENNE
Humboldt R.
Uinta Mts.
Great Salt Lake Desert
Salt Lake City
American Fork
Utah Lake
Provo City
Springville
Ft. Collins
Greeley
Boulder
South Platte R.
Great Basin
Eureka
Eureka
Nephio
Mt. Pleasant
Mount of the Holy Cross
Denver
Aspen
Leadville
Pikes Peak
Sevier Lake
Manti
Grand Junction
Cripple Creek
Colorado Springs
Wheeler Peak
Manhattan
Richfield
Marysvale
Beaver
UTAH
Wasatch Mts.
Green R.
Grand R.
COLORADO
Salida
Pueblo
Arkansas R.
KANSAS
Piocho
Goldfield
Caliente
Barowan
Moab
Ouray
Canon City
La Junta
Blanca Peak
Rhyolite
St. George
Colorado R.
Silverton
Alamosa
Durango
Trinidad
Bullfrog
San Juan R.
Raton
OKLA.
Las Vegas
Grand Canyon
Cimarron
Taos
Mora
Grand Canyon
San Francisco Peak
Kingman
Flagstaff
Gallup
SANTA FE
Las Vegas
Albuquerque
Canadian R.
Williams
Little Colorado R.
Jerome
Winslow
Prescott
St. Johns
NEW MEXICO
ARIZONA
Socorro
Lincoln
Roswell
San Bernardino Mts.
Colorado R.
PHOENIX
Salt R.
Globe
Morenci
San Carlos
Alamogordo
Pecos R.
Gila R.
Florence
Gila R.
Silver City
Carlsbad
Yuma
Gila Desert
Tucson
Las Cruces
Deming
El Paso
Tombstone
Wilcox
Nogales
Bisbee
Douglas
Scale of Miles
0 50 100 150 200 250 300
MEXICO
TEXAS

PRIEST LAKE, KANIKSU NATIONAL FOREST

XLI

Idaho

Idaho bears an Indian name which means "Gem of the Mountains." In nearly every part of the state mountains abound. The loftiest height is Hyndman Peak, about one hundred miles east of Boise, with an altitude of 12,078 feet. Somewhat farther west are the precipitous Sawtooth Mountains, which, with their Alpine lakes, heavy forests, flowery meadows, and clear streams, have rare charm. The mighty Bitter Root Range forms much of the eastern boundary. In its irregular course it bends westerly and narrows the state from three hundred miles at the south to forty-five miles at the north. Idaho is larger than all New England, and has a single county that exceeds Massachusetts in size.

The first explorers of the region were Lewis and Clark, who came across the mountains from the headwaters of the Missouri in August, 1805. They and the twenty-six men with them were the earliest whites to go overland to the

Pacific. In crossing Idaho they kept near the Salmon River, which is about halfway between the northern and southern boundaries. They nearly starved, and resorted to eating horseflesh and roots. Most of their scanty food supply was obtained from the Indians. After this expedition had gone on its way Idaho was visited only by hunters and trappers for a long time. In 1810 Fort Henry was established as a fur trading post on the Snake River, but permanent settlements date from the revelation of Idaho's mineral resources a half century later. The great discovery of precious metals in the northern part of the state was made at Cœur d'Alene in 1882. The name is that of a tribe of Indians. It means Awl-heart, and was originally given to a chief of the tribe in derision of his stinginess. The famous mining camps of the Cœur d'Alene district lie high up on the western slope of a northward projection of the Bitter Root Range. Were it not for the mines, that section of the state would be nearly as complete a wilderness as it was before the white men came thither. It contains almost no arable land, and the timber is fit for little but mining purposes. The network of mines centers about Wallace. From these mines has come $200,000,000 worth of lead, silver, gold,

The Sawtooth Mountains

The Capitol at Boise

copper, and zinc, and they are producing a third of all the lead output of the United States.

Boise, Idaho's largest city and capital, is on the site of an old trading post of the Hudson Bay Company. It was founded in 1862 as the result of gold discoveries thirty miles northeast. From the placer mining ground in that vicinity hundreds of millions of dollars' worth of gold have been sent to the world's mints. Boise is noted for its hot springs, the water from which is piped through the streets, and warms a considerable portion of the city's homes and business blocks. The hot water is also conveyed to one of the largest natatoriums in the West, and many sufferers from rheumatism and kindred ailments are relieved by it.

Twenty miles from Boise on the river of the same name is the great Arrowrock Dam, three hundred and forty-eight feet high, ninety feet of which is below the river, where it is anchored to solid granite. It is the highest structure of its kind in the world.

Arrowrock Dam, near Boise

The width of the base is two hundred and forty feet and that of the top sixteen feet. More than one million tons of material went into the dam. A lake has been formed back of the dam eighteen miles long, and containing water enough to irrigate two hundred and twenty thousand acres.

Sheep Bridge on the Deadwood River

One of Idaho's early settlements is Soda Springs, founded by Brigham Young soon after 1870. It has an ideal climate, and is charmingly situated in a valley surrounded on all sides by rugged peaks in the mountainous southeastern corner of the state. The numerous springs are highly recommended for their medicinal properties, and there are splendid hunting and fishing in the vicinity.

Siwash Indians, Pend Oreille River

One of the thriving towns on the banks of the Snake River, well up toward that river's headwaters, is St. Anthony. Its location was determined by the fact that the river has here cut deep in the basalt that underlies the soil of the valley

a canyon so narrow that it could be easily bridged. Previous to 1893 the place included only "jack-rabbits, lava rock, and Old Man Moon." Mr. Moon came in 1887, built a bridge and a store, and called the place St. Anthony because the river here makes a leap of about thirty feet, and he fancied he saw some resemblance to St. Anthonys Falls in Minnesota. The canyon walls at the bridge are barely fifty feet apart.

The Niagara of the West

In 1893, when the town consisted of three log cabins, and a two-story log store, it was made the county seat. Even now the population does not much exceed two thousand, yet the place has two large schoolhouses, one of which cost $60,000, a $70,000 courthouse, an opera house, three banks, and other features to match. In 1913 there were 26,000 acres of seed peas grown in the county, where the climate and irrigated soil are especially favorable for quality and a heavy yield of this crop.

In the west central part of Idaho is the Weiser National Forest. This is particularly rugged and picturesque in the Seven Devils Mountains at the northern end. Between these mountains and the Cornucopias in Oregon is the Snake River Canyon, which for abysmal depths and magnificent distances is unsurpassed in the Northwest.

The Snake River has carved its deepest gorge farther south near Twin Falls City. Here it flows between lava walls four or five thousand feet high, and here is the Shoshone Fall, or "Niagara of the West," as it has been called, where the river makes a perpendicular leap of two hundred feet from a crescent-shaped ledge nearly a thousand feet wide. The gorge itself is of gloomy volcanic rock devoid of any beauty in color, but savagely impressive by reason of its size, and also because its columnar and grottoed walls and vast terraces are suggestive of the planning and labor of some titanic architect and builder. As for the great foaming waterfall, the onlooker is satisfied that here is one of the noblest sights on this continent. But it is not seen to advantage in late summer and early autumn when the water is low. Immediately above the leap are rapids and lesser falls, while big bowlders and various islets block the way and add to the wild beauty. Farther up the river in the quiet water beyond

In Kaniksu National Forest

the rapids a clumsy flat-bottomed ferry boat plies back and forth. About 1910 the man who ran the ferry imbibed too freely of whisky, and went over the falls in a rowboat. His body was found in the river below several days later. A foolhardy Indian half-breed once leaped from the crest of the falls. He was dared by a companion to make the jump, and down he went — and he escaped with only a few bruises. About five miles below the fall are the attractive Blue Lakes, where boating and fishing may be enjoyed.

A Potato Field near Shoshone Falls

A black and ragged lava bed covers much of the territory along the course of the Snake River, and forms a desert four hundred miles long and from forty to sixty miles wide. The lava is from half a mile to a mile thick. A rich soil covers most of the lava plains, but there is little rainfall in southern Idaho, and the ever-present and characteristic plant of these plains is the sagebrush. It overspreads all the broad arid valley, and is seldom lacking except where recent fires have occurred or where land has been cleared for cultivation. When conditions are favorable to its growth it may attain a height of ten feet, but usually is not over three feet high, and the clumps are commonly six or eight feet apart so that there is no serious difficulty in riding or walking through it. The light grayish-green foliage enhances rather than relieves the monotony of the plains. A considerable portion of this sagebrush desert has been reclaimed by irrigation and produces wonderful crops.

Buffalo in Yellowstone Park

XLII

Wyoming

Trappers began to range the region that now bears the name of Wyoming in 1807. Fort Laramie, one of the most celebrated rendezvous of the Western trappers, was established in 1834 by the American Fur Company, when the nearest army outposts were seven hundred miles to the east. A few years later the route to the Pacific through Wyoming had become the favorite one, but of all the thousands who went over this route few or none settled permanently within the present limits of the state, partly because of the aridity of the soil, partly because of the pronounced hostility of the Indians, who became increasingly unfriendly as they saw with alarm the movement of so many whites through their hunting grounds. The Indians were not thoroughly subdued until 1879. When gold was discovered in California and the Great Salt Lake Trail became an important highway, the government bought Fort Laramie and transformed it into a military structure to awe the savages who infested the trail. After the savage tribes of the region had become tame, or had removed to far-off reservations, the fort was abandoned.

Settlers began to make their homes there in 1868, and it has latterly developed into a popular summer resort. It is near mountains which afford fine scenery and are rich in minerals. At Laramie "Bill" Nye began his career as a lawyer in 1876. He served as superintendent of schools, member of the city council, and postmaster in the nine years he was a resident of Laramie, and he founded the *Boomerang* and came into prominence as a humorist. An example of his writing at that time is this concerning

"Wyoming Farms

"I do not wish to discourage those who might wish to come to this place for the purpose of engaging in agriculture, but frankly I will state that it has its drawbacks. First, the soil is quite coarse, and the agriculturist, before he can even begin with any prospect of success, must run his farm through a stamp mill to make it sufficiently mellow. This involves a large expense at the very outset. Hauling the farm to a mill would delay the farmer two or three hundred years in getting his crops in, thus giving the agriculturist who had a pulverized farm in Nebraska, Colorado, or Utah, a great advantage.

Tongue River Canyon

"We have, it is true, a large area of farming lands, but they must be crushed and then treated for

alkali, in which mineral our Wyoming farms are very rich.

A Bunch of Range Horses

"The climate is erratic and peculiar. The altitude is between seven thousand and eight thousand feet above high water mark, so that during the winter it does not snow much, we being above snow line; but in the summer the snow clouds rise above us, and then the surprised and indignant agriculturist is caught in the middle of a July day with a terrific fall of snow. He is virtually compelled to wear his snowshoes all through his haying season. This is annoying and fatiguing. The snowshoes make his progress laborious. Besides, he tangles his feet up in the windrows and falls on his nose. Again, the early frosts make close connections with the late spring blizzards, so that there is only time for a hurried lunch between.

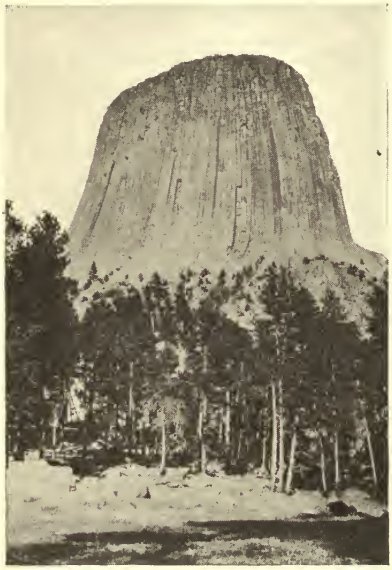
"Aside from these little drawbacks, and the fact that nothing grows without irrigation except white oak clothespins and promissory notes drawing interest, the prospect for the agricultural future of Wyoming is gratifying in the extreme."

Snowshoe Rabbit

The railroad crosses the Continental Divide at Sherman, fifteen miles south of Laramie, at an altitude of a trifle over eight thousand feet.

On clear days Pikes Peak can be seen one hundred and seventy-five miles to the south.

Gold was discovered in 1867 on the Sweetwater River, which joins the North Platte in the central part of the state, and a large inrush of population followed. Cheyenne was founded that year, and about six thousand persons wintered there. It has developed into a prosperous modern city, the largest in the state, and the capital. Cheyenne has always been a great live stock center. The memory of the "Wild West" is kept alive by the annual "Frontier Days" celebration at which bronco busting, steer roping, and Indian dances are features.



Devil's Tower

In the northeastern part of the state, on the Belle Fourche River, thirty-two miles from the railway town of Moorcroft, is the curious Devil's Tower or Bear Lodge, a natural obelisk of columnar basaltic rock, one thousand two hundred feet high, and tapering from a base diameter of eight hundred feet to one of three hundred and seventy-five feet at the top. It is supposed to be the plug of an extinct volcano, the crater of which has been removed by erosion.

At Como, a few miles east of Moorcroft, the railroad is built across a small lake in which are found great numbers of

© *Haynes, St. Paul*

LOWER YELLOWSTONE FALLS

salamanders that grow to be a foot in length and are locally known as "fish with legs."

Coal was discovered in Wyoming by Fremont in 1843. The coal fields cover nearly one half the area of the state, and the mining of coal is an important industry. Wyoming also has productive oil fields.

The greater portion of the state consists of high plains that in places have picturesque buttes and mesas rising above their general level. It is a land of little rain, but wonderful crops are grown on the many irrigated areas, and dry farming is practiced successfully. As a whole, the surface is gently rolling and barren of trees, yet often covered with nutritious grasses that afford pasturage for vast numbers of live stock. The cattle industry suffered a check during the severe winter of 1886–87 when nearly three fourths of the range cattle died of exposure. There have been many conflicts between the range cattle owners and sheep flock masters over the use of grazing grounds. Settlers who selected homesteads covering watering places have also come into conflict with the cattlemen. Some of the settlers subsisted by stealing range calves and unbranded cattle, and it was almost impossible to get a jury to convict these outlaws. Things became so bad that in 1892 an armed force of fifty mounted cattlemen invaded the central part of the state with avowed intentions of killing all the men generally suspected to be stock thieves. They surrounded a log cabin and shot down two of the supposed cattle "rustlers." But this roused the country around, and the cattlemen were attacked and sought refuge in some ranch buildings. Their case was becoming desperate when a troop of Federal cavalry arrived and took the besieged ranchmen to Cheyenne as prisoners. Later the ranchmen were released, and that ended the affair. There are still many cattle in the state, but they are in small herds. The breeds have been improved, and they no longer

© Gifford

Upper Yellowstone and Absaroka Mountains

depend on the open range for a precarious subsistence during the winter, but are sheltered and fed.

Wyoming holds first rank in the sheep industry. Sheep stand the cold on the open range better than cattle and have proved more profitable. They are pastured in the mountains during the summer, and are driven to the plains to find sustenance in winter. An especially interesting time to visit Wyoming is in early summer when the great flocks of sheep are driven to the vicinity of the settlements to be sheared. That affords the only opportunity to see the wandering flocks to advantage without going far into the wilds.

The state has an Indian name which means "Large Plain." When a territorial government was organized in 1869 woman's suffrage was adopted, and this has been maintained ever since. Because Wyoming was a pioneer in giving women equal voting rights with men, it is called the "Equality State." Its highest mountain is Gannett Peak, in the central part of the state, with an altitude of 13,785 feet.

CONSTANT GEYSER, NORRIS BASIN

The northwest corner of Wyoming is occupied by Yellowstone Park, the "American Wonderland," which, in 1872, was made the first scenic National Park in the world. The Indians of the region knew of the tract and had trails across it. They superstitiously avoided the geyser sections. Those, as an old Indian told a park official in 1880, were considered "heap, heap bad." The Indians called the park the "Top of the World," and the "Land of Burning Mountains." They made scant use of it. For nine months of the year the passes into it are blocked with snow, and it is mostly covered with tangled forest. The first white man to set foot in it was John Colter, a hunter and trapper, who crossed it in 1807, and saw numerous geysers, hot springs, and other wonders. Three years later, when he told the story of his discovery in St. Louis, the people laughed in derision. They mockingly dubbed the region "Colter's Hell."

James Bridger, who was recognized as a leader among the Western guides and traders while yet in his minority,

and who ten years later had become the "Old Man of the Mountains," visited what is now the park in 1830 and often afterward. He became well acquainted with its remarkable features. The editor of a leading Western paper prepared an article from his description, and then suppressed it because a man who knew Bridger told him he would be laughed out of town if he printed any of "old Jim Bridger's lies." Undoubtedly Bridger had a habit of reckless exaggeration in telling his experiences, and such was his reputation for romancing that the facts he related about the Yellowstone were set down as the harmless vaporings of a mind to which truth had long been a stranger. You can judge why they should so decide from the following example of his stories:

"Far off across the plain from a camping place where I often stopped was a high mountain that rose on the side toward my camp in a steep bare precipice of rock. It was so distant that the echo of any sound in the camp did not return for about six hours, and I made the mountain serve as an alarm clock. When I was about to retire for the night I would call out lustily, 'Time to get up!' And the alarm would come back the next morning at just the hour that I wanted to bestir myself."

RIVERSIDE GEYSER © By Haynes

The discovery of the Yellowstone Wonderland, so far as its full and final disclosure to the world is concerned, was the work of three parties, the first of which visited it in 1869. This consisted of three men who went to the region to verify or refute the rumors concerning it which had been agitating the people of Montana for some years. They set out September 6 from Diamond City on the Missouri River, forty miles from Helena, and in the thirty-six days before they returned saw the Yellowstone Falls and many of the other attractive and marvelous features of the country.

A party of nineteen went to the region the next year. There were nine civilians from Helena, a small military escort, and two packers and two colored cooks. They had thirty-five horses and mules, and altogether the "outfit" made quite an imposing cavalcade. It was very successful in its exploring, but on September 9, while traversing the labyrinths of fallen timber between the projecting arms of Yellowstone Lake on its south side, Mr. Everts, fifty-four years of age, became separated from his companions, and was forced to spend the night alone. In the morning his horse escaped from him and was never seen again. On the horse were nearly all Mr. Everts's belongings. Even his eyeglasses were lost or broken so that he could see only a

KEPLER CASCADES, YELLOWSTONE

short distance. The most valuable thing left in his pockets was a little field glass. He was one hundred and fifty miles from home, without a blanket or a fire, in so high an altitude that there were severe frosts every night. For two days he was without food, and then he discovered a kind of thistle that had a radish-like root which proved to be edible and wholesome. Thereafter he tried to always have a supply with him. One night a mountain lion came prowling toward him. He hastily climbed a tree, and the animal wandered howling about the base for a long time. When it finally went away Mr. Everts came down half dead with stiffness and cold. Once, in the midst of a bleak snowstorm that whitened the earth, a little benumbed bird fell into his hands, and he at once killed and ate it. He stayed seven days beside a small lake in a deep valley surrounded by lofty mountains. There were hot springs in the vicinity that afforded him some relief from the cold, and he built a shelter of boughs near one of them. The boiling water served for cooking his thistle roots. At length he discovered that he could make a fire by allowing the sun's rays to pass through a lens from his field glass on to a piece of soft dry wood. After that, in his wanderings, he planned to camp early enough toward each day's end to kindle a fire with his lens. One day, on the shore of Yellowstone Lake, he found a

A Yellowstone Elk

gull's wing that by some chance had been torn off. He hurriedly stripped it of feathers, pounded it bones and all between two stones, started a fire, and boiled the wing in a little tin can which he had picked up at one of the camps. It made the most delicious soup he ever tasted. His mind began to feel the effect of his suffering. Strange visions came to him, and he lost all sense of time. But on and on he went, his strength waning, and his day's journey getting shorter, and the nights growing more bleak and cold. At last he came out into open country on a high plateau and could see distant hills where he knew he could find help. He was following a trail that led thither when he stumbled and fell, and was unable to rise. Apparently the end was at hand. But while he lay there a voice called his name, and two men leaped from their horses beside him. He was saved after having been lost thirty-seven days. His wanderings had probably been wholly within the limits of the park, and he was found a few miles west of Yancey's, not far from

Minerva Terrace

the Mammoth Hot Springs. His companions had spent two weeks searching for him, lighting fires, discharging guns, putting up signs, and leaving food here and there, but all to no purpose. They finally concluded that he was no longer alive, and reluctantly went on their way without him. When they got back to the settlements a relief expedition was organized, and he was found by two expert mountain scouts of this relief party. He fully recovered and lived to the age of eighty-five.

The news of the 1870 expedition created widespread interest throughout the country and led to a more thorough exploration the following year by the United States Geological Survey and military engineers. A few months later the Yellowstone National Park was created. It is the largest of all our National Parks, sixty-two miles long and fifty-four wide, which means that it is about the size of Rhode Island and Delaware combined.

Beyond the Bitter Root Mountains, northwest of the park, was the land of the Nez Percé Indians. These Indians went on the warpath in 1877, and after several battles with the whites came over into the Yellowstone Park on August 23. Two parties of Montana tourists were there at the time. One of these, consisting of seven men and two women,

GIANT GEYSER © *Haynes*

© *By Haynes*

Upper Yellowstone Falls

was camped on the bank of a little stream west of the Fountain Geyser when the Nez Percés arrived and compelled the party to go with them up Nez Percé Creek. But when they reached the foot of Mary Mountain, they confiscated the tourists' supplies and horses, gave them some of their own broken-down nags, and let them go.

The tourists in the other party were ten men, including a colored cook. They had camped in the timber near the forks of Otter Creek about a mile and a half from the Upper Falls of the Yosemite, and were preparing dinner when they were apprised of the presence of the Indians by a volley of musketry. In the hurried flight of the whites that followed, one was killed. The rest got away, and most of them went to the Mammoth Hot Springs. While the colored cook and a German music teacher and another man were still there in a one-story log cabin, which was the first building erected in the park, and which stood in the gulch west of Liberty Cap, some Indians were seen approaching. The music teacher thought they were friendly scouts, but his companions fled precipitately. He was shot dead. One of the two fugitives escaped without any serious adventures. The cook, however, as he retreated up the gulch back of the cabin, was followed by the Indians. At a turn in the trail, which concealed him from their view, he shinned up a tree and hid among the

branches. There he stayed until after dark. Then he came down and spent the night in the brush. A bear visited him in the morning, and he was undecided whether to risk being eaten by the bear, or to venture out and take the chance of being killed by the Indians. He concluded to stay with the bear. The creature stood up on its hind feet and looked at him for a while, then ran away. Later the cook contrived to get to a camp of scouts two miles north of the park. When he went to bed, after supper, his heart was so full of gratitude for his escape that he started in to spend the night praying aloud and thanking God for His goodness to him. The scouts soon tired of the darky's devotions and told him to desist and let them sleep. He responded that God had saved his life, and he was going to thank Him as long and as loud as he pleased whether the camp got any sleep or not. The commander finally stationed a guard to compel him to silence.

Lewis Falls, Yellowstone Park

The park has an entrance on each of its four sides. A railroad on the north and one on the west come directly to its borders. At first the government gave it little attention. Hunters invaded the domain and slaughtered game, attempts were made to run a railroad through it, and one company almost obtained title to Yellowstone Falls. But a few people, at great personal sacrifice, saved the park in its primitive naturalness. It has its hotels and camps, and its auto-stages which

make the circular tour in two days; and you can go tramping or riding on the trails, fishing in the lakes and streams, and bathing in the hot-water pools. You are likely to encounter cool weather, and should provide clothing accordingly. Heavy shoes or rubbers are needed for walking about the geyser basins.

The central part of the park is a broad volcanic plateau about 8000 feet above sea level. Roundabout are mountain ranges whose peaks and ridges rise from 2000 to 4000 feet above the table-land. In the park are more geysers than are found in all the rest of the world, dancing and singing amid thousands of boiling springs, whose basins are arrayed in gorgeous colors like gigantic flowers. Here too are hot paint pots and mud volcanoes, the contents of which are of every color and consistency, and which plash and heave and roar in bewildering abundance. You see Nature at work cooking whole mountains, boiling and steaming flinty rocks to smooth paste and mush — yellow, brown, red, pink, lavender, gray, and creamy — the most beautiful mud in the world. Some of the spring basins hold limpid pale green or azure water, but in others is scalding muck which is tossed up five, ten, and even thirty feet in sticky rank-smelling masses, with gasping, belching, thudding sounds.

© *Haynes*

GROTTO GEYSER

Over four thousand hot springs have been counted and a hundred geysers. The whole region hisses and bubbles and steams. Some of the larger geysers give tremendous exhibitions of energy. When in action they throb, and boom as if thunderstorms were at their roots, while the column of hot water stands rigid and erect, dissolving at the top into mist and spray. The great Excelsior Geyser, which is unequaled in size the world over, throws forth at irregular intervals to an impressive height a column of water fully sixty feet in diameter. The adjacent Firehole River is ordinarily about one hundred yards wide and three feet deep; but when the geyser is in eruption the volume of the river is doubled and it is too hot and rapid to be forded. Some of the geysers spout every few minutes, others at intervals of hours or days, and a few at irregular intervals of weeks. The Giant Geyser, in many respects the finest of all, spouts at intervals of six to fourteen days for an hour at a time. It throws the water to the unequaled height of two hundred and fifty feet. Old Faithful, which plays hourly for four minutes, gets into action by sending its water higher and higher with graceful ease until the upheave attains a height of at least one hundred and twenty feet. The largest spring, and one of the most beautiful, is the Prismatic. It has a circumference of three hundred yards. The water is pure deep blue in the center, but fades to green on the edges. Its basin and the slightly terraced pavement around it are astonishingly bright and varied in color. One of the most notable of the steam vents is that whose noise gives the name to Roaring Mountain.

The Yellowstone plateau is a vast lava deposit, much worn by glacial action, which has given the region its flowing, attractive lines. The outpourings of ashes, lava, and cinders from the old volcanoes overwhelmed many extensive forests. In Amethyst Mountain are twelve petrified forests, one

above the other, buried at different periods. On the mountain top the pines and spruces of a new forest flourish. The flow of a river and other factors have eroded a wide valley down through the buried forests on the northern flank of Amethyst Mountain. The mud and ashes that buried the forests changed to stone, and mineral water circulating down through the deposits gradually fossilized the trees. Many changed to opal. Limbs and tops of trees were broken off by the volcanic deluge, and many trees were overthrown. Some were as much as ten feet in diameter and of great height.

Fishing Cone, Yellowstone Lake

Another curious feature of the park is the Obsidian Cliff, a mass of black volcanic glass, which is close to the main road south of Mammoth Hot Springs. The Indians used to resort to it to get material for making arrow and spear heads.

There are thirty-seven lakes in the park, the largest of which is Yellowstone Lake, whose irregular shore line has a length of one hundred miles. It exceeds in size that of any other lake at so high an altitude. A network of streams covers the park, and one hundred and sixty-five of them have names. Waterfalls are numerous. In Two Ocean Pass, on the very summit of the Continental Divide, 8150 feet above the level of the sea, is a lakelet whose waters in part flow to the Atlantic, and in part to the Pacific.

The Yellowstone River goes thundering down into the Grand Canyon in two magnificent falls. The upper fall is

one hundred and twelve feet high, and the lower fall three hundred and ten feet. Below the falls is a canyon twenty miles long and a thousand feet deep, with walls that for the first three miles are wonderfully colored.

MT. MORAN © *Haynes*

A finishing touch of beauty is given to the park by its wild flowers. It is one vast summer garden of them, and you rarely find a spot so sterile that Nature has failed to beautify it with blossoms. They start almost from under the melting drifts, and persist in autumn until overwhelmed by snowstorms.

Yellowstone Park is the greatest wild animal preserve in the world. There the animals are not pursued, trapped, nor shot. They are free from the fear of being killed by man, and the park is an ideal place in which to study their character. None of our big wild animals is naturally ferocious. They attack only in self-defense — when cornered and assailed by the hunter — or to protect their young. Beasts of prey are held in check by the government, which disposes of mountain lions, lynxes, wolves, coyotes, wild cats, and other animals when they become too destructive or too numerous. But even the most undesirable of these seem to be in no danger of extinction.

The park has the only herd of buffalo that still roams in its native freedom, and there are three times as many in

the tame herd which is kept in immense corrals in the Lamar Valley. For feeding them in winter hay is made from native grass, and from timothy grown on irrigated meadows. The wild herd has developed from a few animals that broke out of a tame herd inclosure some years ago.

Most likely the only bears you will see are the half tame ones that go to the hotels every night for table scraps — baking powder biscuit, canned stuff, and beefsteaks that have proved too tough for the tourists. They are often a great annoyance because of their habit of breaking into tents and buildings in search of food. Both the grizzly and the black species flourish in the park.

The park has its antelope, and moose are also found there. The latter have increased greatly in numbers in recent years. Their principal habitat is the Yellowstone Valley above the Lake.

Deer abound, and are as familiar around the buildings at Mammoth Hot Springs as a herd of domestic cattle. There are 30,000 elk in the park. In severe snowy winters, when food is scarce in the mountains, the park rangers scatter hay in the valleys, and thousands of deer and elk, and hundreds of Rocky Mountain sheep, come down to feed.

Beaver are abundant in nearly all the streams, and nowhere else in the world can the life of this remarkable animal be studied to better advantage. There are many otter, mink, and muskrats. Among the smaller animals that are plentiful are woodchucks, red squirrels, and chipmunks. Frogs abound, and there are three or four species of snakes, all harmless.

You very likely will not see much of this wild life if you keep to the main highways. To be convinced of the abundance of game in the park you should travel the remoter bridle paths.

The most numerous birds are the waterfowl that frequent

the lakes and streams. The pelican is an attractive feature of Yellowstone Lake. Gulls and tern abound, and there are many grebe, great blue herons, sand-hill cranes, mud hens, and spotted sandpipers. Water ousels frequent the torrents of the region, which apparently furnish them with an ideal home. They are seen everywhere among the foaming cascades and on the slippery rocks, and they remain in the park the year round. Geese come in great numbers to the marshes and warm spring districts in autumn. There are many ducks of varied species, and they stay all winter where the water from the hot springs keeps the streams open. Around Mammoth Hot Springs they frequent the roads and barnyards for food, and at first sight resemble domestic flocks. Sportsmen, who recall their wariness elsewhere, can scarcely believe they could become so tame.

Golden and bald eagles are occasionally seen. The osprey is common, and several other species of hawk are abundant. Their nests can be seen in considerable numbers in the tops of dead pine trees along the north shore of Yellowstone Lake.

Teton Mountains

The notes of an owl often reach one's ears at night. Ravens, crows, and magpies are much in evidence. The ruffed grouse is frequently heard or seen. A familiar bird to all tourist campers is the Rocky Mountain Jay, or "camp robber," as it is commonly called. It could be more truly described as a camp scavenger. Among the better known

and more numerous of the smaller birds are robins, bluebirds, chickadees, nuthatches, tanagers, meadow larks, kingfishers, cliff swallows, and woodpeckers.

Mosquitoes begin to appear late in June, but by August have nearly disappeared. Their reign is followed by that of several species of horseflies, which are despicably fierce and voracious. The common house fly abounds and is at its worst in September. It is an unmitigated nuisance in all camps. An exceedingly diminutive gnat flourishes in a career of torture for a brief period early in the season.

The trout fishing that the park affords cannot be excelled.

Sheep Coming from a Corral

XLIII

Utah

Utah is commonly called the "Mormon State." Its name is that of an Indian tribe and means "Dwellers in the Mountains." It is part of an immense basin that lies between the Rocky Mountains and the Sierra Nevada and extends from Oregon on the north eight hundred miles down into Mexico. The basin has no outward drainage, and the final receptacle of each of its streams is some salt lake. Almost all of Utah was once covered by a great body of fresh water, three hundred and fifty miles long, and half that width at its broadest part. The surface of this lake was a thousand feet above that of the Great Salt Lake. The outlet was to the Pacific Ocean by way of the Snake River and the Columbia. Great Salt Lake is eighty miles long and thirty wide. Three small rivers flow into it. The water of these rivers is fresh — that is, the quantity of saline

matter in it is too small to be discovered by taste. Yet more than 500,000 tons of saline matter are brought to the lake each year by the streams. The water is evaporated, but the dissolved solids cannot escape in that way. For centuries they have accumulated until the lake water holds nearly as much mineral substance as it can retain in solution. There is some variation in the size of the lake. Each year it rises in winter when the cool air has little power to absorb moisture, and continues to rise in the spring when the rivers are swollen by the melting of snows in the mountains. But in summer the hot air rapidly absorbs the water, and toward the end of the year the level is about sixteen inches below its spring maximum. The lake progressively rises in a series of wet years, and falls in a series of dry years. The summer level of 1877 was more than fourteen feet above that of 1903. So strong is the brine that ice forms only in zero weather. No fish can live in it. The only permanent inhabitant is a tiny "brine shrimp," a third of an inch in length. A minute fly passes its larval stage in the water and leaves behind it the discarded skin. These brown skins darken the water's edge and often sully broad belts of the lake surface. Fortunately the swarming flies do not bite. The salt spray is fatal to all land vegetation, and there are no shoal-water plants. Although the lake is so salty, some of its many islands have on them fresh-water springs of rare excellence. Certain of the smaller islands are favorite nesting places of gulls and pelicans. Great Salt Lake was discovered in 1824 by the pioneer trapper, Jim Bridger, who at first thought it an arm of the Pacific Ocean. The earliest white man to navigate the lake's buoyant waters was Gen. Fremont on his way to Oregon in 1842.

Utah was settled in 1847 by the Mormons, as they are called, but who prefer to style themselves the "Latter-day Saints of the Church of Jesus Christ." The first arrivals

were one hundred and forty-one men and three women who started from the Elk Horn River near Omaha on April 9. Their leader was Brigham Young. They traveled in squads of ten, each of which had a wagon, two oxen, two milch cows, and a tent. An average day's journey was thirteen miles. When they began to come through the canyons of the Wasatch Mountains in July they looked down on a valley bare of tree or shrub, except for sagebrush, patches of chaparral, and here and there a gnarled willow or cottonwood. One of the women was so overcome by the desolation that she said, "Weak and weary as I am, I would rather go a thousand miles farther than stop in this forsaken place."

But the company at once began the work of permanently establishing themselves. They irrigated and plowed, and trees were hauled from the mountains to use in constructing the embryo town of Salt Lake City. They built huts of logs and adobe, and a bowery which for a time was church, courthouse, and capitol. Only three months after the pioneer entry a school was opened in a tent with hewn slabs and sections of logs for seats and desks. In May and June of the next year the settlers had to fight a scourge of Rocky Mountain crickets which invaded the fields and gardens in countless hordes. The people had been reduced to despair when a great flight of gulls arrived and devoured the crickets with such voracity that few escaped. Since then the gulls have been sacred in Utah. Each spring they come to the land that is being

Balance Rock on Wilson Mesa

plowed, and so confident are they of their safety that they can be approached almost within arm's length.

The Witches, near Echo

In 1849 it was proposed to establish a state government and to call the state "Deseret," a name that occurs in the Book of Mormon, and which means "the honeybee." The hive, expressive of the characteristic industry and thrift of the people, was chosen as the symbol and seal of the prospective state. But not until 1894 was statehood granted by Congress.

Salt Lake City was on the road to the gold regions when the gold fever was at its height, and the settlers found a ready market for anything they could produce from the soil. Merchandise was brought in by fleets of prairie schooners. Up to 1871 the original settlers lived apart from the rest of the world, but mining discoveries brought an incursion of Gentile population, and the Gentiles have steadily grown more numerous in Utah ever since, though the Mormons are still the dominant sect. Salt Lake City, which is the capital and the largest place in the state, is fast becoming a great metropolis. Its situation is admirable in the spacious valley with mountains near at hand. The streets are wide and shaded with trees, and each house in the residence section has grounds about it, giving an effect that is cool and agreeable. Temple Block, the Sacred Square of the Mormons, lies near the center of the city. Here are the many-pinnacled granite temple and the great mushroom-shaped tabernacle, whose dome is one of the largest unsupported arches in the world. The latter building has a

seating capacity of 8000 and can accommodate half as many more. It is equipped with one of the largest and sweetest-toned pipe organs ever made. The corner stone of the temple was laid in 1853, but not until forty years later was the structure completed. It cost $6,000,000. On South Temple Street are two of the houses that Brigham Young shared with his numerous wives — the Lion House, with a lion over the entrance, and the Beehive House, surmounted by a beehive. In few cities is electric energy more generally utilized. The street cars are driven by the power of a mountain cataract thirty-five miles away. Streets, public buildings, and dwellings are lighted from the same source, and the factories and industrial establishments are electrically operated.

No summer visit to Salt Lake City is complete without a trip to Saltair Beach, eighteen miles west, where is to be had the most unique bathing in the world, in the Great Salt Lake.

Salt Works, Great Salt Lake

You can frolic in the water as you please without fear of drowning. The body floats like a cork, and if you balance yourself in an upright position your head and shoulders are above the surface. Among Saltair's pleasure resort attractions is one of the largest dancing pavilions in existence.

The water of the lake is one quarter salt. To secure the salt for commercial purposes three or four hundred acres of land on the borders of the lake are diked off, leveled, and cleaned. In the spring of the year water is pumped from

the lake into great reservoirs, and later is pumped into the harvesting pond to a depth of six inches. This depth is maintained against the rapid evaporation by constantly adding water until, at the end of the season, there are four or more inches of damp salt on the bed. When most of the remaining water has evaporated, lines of plank are laid on the salt, and men with wheelbarrows gather and pile it in heaps that each contain about 2000 tons. For a short period it remains in the piles to thoroughly drain, and after that it is either shipped away just as it is to feed cattle and sheep, or goes into a refinery where it is ground and sifted and packed for household use.

Devil's Slide

The Southern Pacific Railroad, which formerly went around the north end of the lake, now crosses it in the middle west of Ogden on a trestle twenty-nine miles long that cost $4,500,000. Forty-three miles of distance are saved, and a climb of 1500 feet.

At Salduro, a hundred miles west of Salt Lake City, beyond the Oquirrh Mountains, is an enormous bed of solid salt sixty miles long with an average width of fifteen miles and a depth of nearly twenty feet. That means not less than thirty billion tons of salt, and this salt is ninety-eight per cent pure. It is so solid that when a telegraph line was established across it, power drills drove small holes four feet deep, and then dynamite was used to enlarge the holes so the poles

Forest Ranger in Logan Canyon

could be set in them. Grooving machines hauled by six-ton motor trucks are used for cutting the surface into squares, and when the blocks of salt have been split out they have to be sawed into merchantable shape. Much of the salt is shipped in the solid chunks, but a portion goes through the refining process at Salt Lake City. Kit Carson declared that this expanse of salt was the only true desert in America. On its entire extent not one atom of animal or vegetable life has ever been found. It is a region of mysteries and deceptions. A man a mile away assumes gigantic proportions. An automobile in rapid motion appears to be moving through the air. Mountains fifty miles away seem to be within easy strolling distance. The silence is weirdly oppressive. Even the wind has to put forth a vigorous effort to be heard, for there is nothing to interrupt it and cause any sound. But the beat of a horse's hoofs on the salt can be heard for miles, and a watch laid on it ticks like a great hall clock. One of Salduro's claims to fame is that a world's record for automobile speeding was made on this glaring white salt desert.

In Weber Canyon, southwest of Ogden, where the Union Pacific Railroad comes through the Wasatch Mountains, is the Devil's Slide, in plain sight from the trains. It consists

of two eroded limestone reefs twenty feet apart that stand out forty feet from the general slope of the canyon side and go from the base far up the height.

Brigham, twenty-one miles west of Ogden, is almost completely hidden in peach orchards, and is called the Peach City. Early in September it celebrates Peach Day, and on that day there are free peaches and plums and melons for all the thousands of people who visit the city. At Dewey, far up in the northern part of the state, may be seen thousands of acres of sugar beets, and three miles to the west is a million-dollar beet-sugar factory.

Directly north of Great Salt Lake the first girding of the continent with a railroad was completed at Promontory in 1869. While the Union Pacific had been moving west, the Central Pacific had been building east from San Francisco. On the morning of May 10 a company of railroad officials, amid a mixed crowd of six hundred Mormons, Mexicans, Indians, Chinese, negroes, bullwhackers, mule-skinners, and frontiersmen gathered to lay the last tie. This was of California laurel beautifully polished. When it was put in place, a spike of gold, silver, and iron from Arizona, and one of silver from Nevada were driven. Lastly a spike of California gold was pounded into the tie with a silver sledge by Leland Stanford. The completion of the road was announced by telegraph throughout the nation, and cannon boomed and bells rang in every city in the land.

A particularly interesting trip from Salt Lake City is thirteen miles southeast to Heber. After passing through Parleys and Provo Canyons the road reaches an altitude of 7310 feet. One of the unique mountain resorts along the way is Midway Hot Pots, a curious freak of nature akin to the Yellowstone Geysers. The state's loftiest mountain is east of here in Wasatch County. It is Kings Peak, 13,498 feet high.

In the southwestern corner of Utah, near the Nevada boundary, are the Mountain Meadows, four or five miles in length and one mile wide. Here a party of one hundred and thirty-six emigrants with six hundred cattle on their way to Southern California camped September 5, 1857. That night their cattle were driven off, and at dawn they were attacked by Indians. After withstanding a siege of five days a party of Mormons under the pretense of friendship came to their relief. As the Mormons were taking the distressed emigrants to supposed safety they began a traitorous massacre while still in the valley. Three men got away, but were slain afterward. The rest of the men, and the women, and even the children not under eight years of age were killed. Most of the corpses were scalped by the Indians, and finally they were piled in heaps in a ravine and a little earth thrown over them. This was washed off by the first rains, leaving the remains to be devoured by wolves and coyotes, who dragged away the bones and scattered them for a mile round about. Two years after the massacre a detachment of United States troops interred the remains, and over the last resting place of the victims a cone-shaped cairn twelve feet high was erected. The survivors of the slaughter were seventeen little children. They were scattered among Mormon families at various points in the

Natural Bridge in Utah Desert

territory, but all were recovered in about a year and sent to relatives in Arkansas. Those concerned in the massacre had pledged themselves by the most solemn oaths to secrecy, and to insist that the slaughter was wholly the work of Indians. But suspicion was aroused, and John T. Lee, who was chiefly responsible for the tragedy, became alarmed and left Utah to hide in a cave in the Grand Canyon of the Colorado River. There he remained for years. When arrested, he was found in a hogpen at a small settlement in southern Utah. A trial proved his guilt and showed that the Mormon Church had nothing to do with the massacre. Lee was executed March 23, 1877, near the cairn at the Mountain Meadows, by the bullets of a military guard.

Rainbow Natural Bridge

Some of the most notable scenery in the state is in the extreme southwest portion on the borders of Arizona. The upper valley of the Virgin River here is a wonderland of magnificent canyons and heights. One of the branches of the river is the Mukoontowrap, the valley of which is called Little Zion by the Mormons. Near the outlet is Great Temple Butte, which rises 4000 feet above the stream. It is a stupendous vertical uplift of many-colored rock that has never been ascended. The valley contracts farther up to a canyon with walls less than a score of feet

apart, and 1500 feet deep. There is an extravagant play of color throughout the region.

Utah has four natural bridges in the deserts of the southeastern part of the state that are unexcelled in impressiveness and in wildness of setting. Three of these are not far apart, and the largest of the three has a span of two hundred and sixty feet and a height of one hundred and fifty-seven feet. On the borders of Arizona, sixty-five miles to the southwest, is Rainbow Natural Bridge, the largest in the world, with a span of two hundred and seventy-nine feet and a height of three hundred and nine. Not until 1909 was it seen by white men. The Navajos hold it in great reverence, and before they will pass under this rosy-hued tremendous arch of stone they say a prayer to it.

PIKES PEAK, THE "MONUMENT OF THE CONTINENT"

XLIV

Colorado

The "Backbone of the Continent" is the Rocky Mountains, which are also aptly called the "Roof of America." Their main range, known as the Continental Divide, parts the waters that flow toward the Atlantic from those that flow toward the Pacific. The name Rockies fairly describes the mountains, for enormous crags and bold peaks of bare rock are omnipresent. The altitudes are too high and the rainfall of the region is too light to encourage vegetation, which might hold the disintegrating rock material and clothe the heights with soil and greenery. Deep chasms have been worn by the streams, and these channels are seldom bordered by alluvial intervales.

Colorado is preëminently the Rocky Mountain State. It has fully thirty-five peaks that are over 14,000 feet high,

and more than one hundred others that exceed 13,000 feet. The peak that overtops all the rest is Mt. Elbert, a few miles southwest of Leadville, with an altitude of 14,402 feet. The name of the state is Spanish. It means "Colored red" and is descriptive of the water in the river of the same name. Colorado is called the "Centennial State" in allusion to the fact that it was admitted to the Union in 1776 when the nation celebrated its hundredth birthday. Its people are nicknamed "Rovers," which refers to the disposition of the settlers at the time of the Pikes Peak gold fever.

The Colorado region was partially explored in 1806 by Lieut. Zebulon M. Pike. In 1820 the explorer Long crossed the spot where Denver now stands. He reported that all the region west of the Missouri was "uninhabitable by a people depending on agriculture for their subsistence." After that the Great American Desert took possession on our maps of that vast tract of country. The first overland emigrants to the Pacific coast crossed the state in 1841. Colonists who

Photo by Wiswell Bros.

Wastes of the Continental Divide

came from New Mexico in 1854 founded Conejos on the southern border of Colorado in the valley of the Rio Grande.

In 1858 a few settlers laid out the town of St. Charles among the cottonwoods on the east side of Cherry Creek, where the creek joins the Platte. That same year another party laid out a town on the opposite side of the creek and called it Auralia. Then came a third party, when the St. Charles town site promoters were absent, jumped the layout, and started to develop a town which they named Denver City in honor of the governor of Kansas. It was about the most desolate spot on earth, and they were afraid the name was all there ever would be to the place. In order to boost it as much as they could they put "City" on the end. The early cabins that were erected here and in the other settlements were just hovels with walls of logs. The cracks were chinked with small sticks and mud, and the roofs were made of poles slanting down from the peak to the

Photo by Wiswell Bros.

YACHTING WATERS IN ROCKY MOUNTAIN NATIONAL PARK

Longs Peak from the Entrance to Glacier Gorge

eaves and covered with grass and dirt. For doors logs were split and hewed down to rough boards, and, after boring holes, wooden pins were used to fasten the boards together. The hinges were of wood or rawhide. No glass was available, and the window openings were closed with old sacks. A new gold fever was on, and in the spring of 1859 many hundreds of newcomers camped in and around the towns of Auralia and Denver City. Report says 150,000 men started across the plains that spring, and generally they had painted on their wagon covers "Pikes Peak or Bust." Yet a third of them turned back, and not half of the

© *Enos Mills*

Top of Moraine, Estes Park

Longs Peak from the "High-drive"

rest who went on into the mountains stayed. Gold in paying quantities was far from common. One man, instead of seeking a will-o'-the-wisp fortune in the yellow sands, settled down near Denver and became wealthy raising potatoes. He was known as "Potato Clark." A printing outfit arrived in Denver April 21, 1859, and two days later was issued the first number of the first paper printed in Colorado. Early in 1863 a fire destroyed much of the business portion of Denver. The following summer a terrible drought parched the plains, and then came a winter, cold beyond all previous experience, that caused much suffering among the people and killed many cattle. In the spring Cherry Creek, which was usually more

A Bighorn Sheep

sand than stream, rose in fury, swept away the flimsy bridges, and destroyed twenty lives and nearly a million dollars' worth of property. The Indians went on the war-path that year, killed a number of persons near the city, cut off all communications with the East, and left Denver greatly alarmed with only six weeks' supply of food. On November 29 of the same year a government force of seven hundred men made a surprise attack at dawn on an Indian camp beside Big Sandy Creek, forty miles northeast from Fort Lyon, which was a frontier post on the north bank of the Arkansas, thirty miles east of La Junta. The soldiers showed a savagery which the foe could hardly have exceeded. In this Sand Creek Massacre, as it is called, they slew about nine hundred men, women, and children. Hardly one of the Indians escaped. The whites lost ten in killed and fatally wounded.

Aspen Grove in Estes Park

In the several preceding years a large amount of gold had been taken out of the easily worked placer mines, but now the supply

seemed exhausted, and not until proper processes were discovered and adopted for mining and ore reducing was there a new boom. The Union Pacific Railroad reached Denver in 1870, and the place afterward rapidly developed into the "Queen City of the Plains." It is the state's capital and largest city. Not far to the west the Rocky Mountains loom in an unbroken line along the horizon, and one of the city's striking features is the way you can look up so many of its streets and see the mountain heights filling the end of the vista. It has a reputation of its own as the "City of Lights," so brilliant is the illumination of the streets, public buildings, and business blocks. The museum in the City Park contains an interesting collection of Colorado animals.

Winter Sport

Lake Nanita

Chasm Lake and Longs Peak

If you are to spend a summer in Denver and the adjacent mountains, you would do well to have stout footwear, a sweater or overcoat, and a khaki suit for climbing and long walks. Denver itself is over 5000 feet above the sea, and on account of this altitude the air is lighter than in most regions. The air is also notably free from dampness. You always find the shade cool even in the middle of the day, and you can be sure of having cool nights. With Denver for headquarters you can take thirty-eight rail, trolley, and automobile trips, many of which require no more time for each than a single day. Among the recreations to be had at the mountain resorts are riding, picnicking, climbing, wild-flower excursions, hunting, fishing, swimming, boating, golf, and tennis.

One of Denver's most remarkable enterprises has been the acquisition of a series of ten Mountain Parks, embracing a total area of five square miles of rugged cliffs and shadowy valleys. The nearest one is twelve miles from the city. A trip of sixty-five miles to include them all can be made over excellent roads by automobile in an afternoon. To buy and develop these parks has cost about half a million dollars.

Beaver Dam near Estes Park

Nine miles northwest of Denver is Bowlder Canyon, whence drives may be made to the picturesque Gregory and Sunshine canyons. The mountains and gorges have many mines that produce a fabulous wealth of gold and silver, and the whole district is dotted with mining towns, some of which are reached by railways that show most startling and daring methods of construction. A particularly attractive excursion from Denver is by railroad seventy miles to the summit of Mt. McClellan. You pass through Golden, Colorado's capital from 1862 to 1868, and enter Clear Creek Canyon, where the earliest discovery of gold in the state was made, and as you go on, twisting and turning to follow the vagaries of the rushing

Falls below Chasm Lake

torrent, you look up to see Mother Grundy and Hanging Rock. Some of the cliffs are a thousand feet high; and along the way are great mines, and enormous dumps of gold and silver ore. You pass Idaho Springs, frequented for its hot and cold mineral springs.

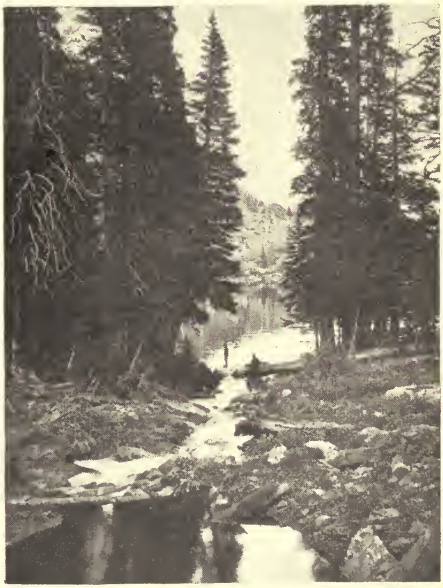
Mt. Otis

Odessa Lake

Beyond the popular summer resort of Georgetown the railroad passes through the Devil's Gate and climbs upward by the famous loop that bends back on itself and crosses the track previously traversed by a lofty bridge. The distance from the valley to Silver Plume on the upland is only a mile in a direct line, but by the sinuous railroad is over four miles. The upward journey continues by a zig-

Bear Lake

zag course that is negotiated by switching. The track clings to a cliff of rugged rocks, and you look down on mills and villages, and over to mountains honeycombed with mines. Where you cross the range the back view commands a descent of 3000 feet, and you can see six tracks one above the other forming the great "Ladder to Cloudland" that you have just ascended. A little farther on is another big gulch, and you look down an almost perpendicular slope to a lake 2000 feet below. At Waldorf is the highest post office in the world, 11,666 feet above the ocean. When you reach timber line you find that the side of Mt.



A Glimpse of Upsilon Lake

TYNDALL GLACIER ABOVE DREAM LAKE

McClellan is clothed with wild flowers, among which the columbine predominates. At the summit are tremendous upheavals all about, and one hundred and six prominent peaks are visible in the vast panorama. You feel lost amid this sea of mountain peaks — this silent chaos of immensity. One of the surprises of the height is the ice palaces, whose walls flash and glint with fairy-like beauty and strangeness as they reflect the lights the visitors carry.

In 1915 a section of the Rocky Mountains, fifty miles northwest of Denver, chosen as representative of the noblest qualities of the mountain region, was set aside as the Rocky Mountain National Park. The area of the park is about four hundred square miles, and it includes a twenty-five-mile stretch of the most rugged section of the Continental Divide. Here

S. O. S.

West Spanish Peak

are fifty peaks with summits more than two miles high. The mountains are spangled or completely covered with snow during the greater part of the year. The first settler within the limits of what is now the park was Joel Estes, who came in 1860, and from whom the broad valley gateway has been named. He built a cabin on Willow Creek in the foothills. For many years after that the region was visited by hunters who followed the deer and elk and trapped the beaver in the valleys, and who shot the bear and mountain sheep in the fastnesses of the heights.

The glacial epoch has not closed in the higher parts of the park. The one condition necessary for the formation of a glacier is an excess of accumulated snow over waste. In a region where there is a heavy snowfall during the winter the snowfields endure throughout the summer at much lower altitudes than when the snowfall is light. On Mt. Rainier, where the annual snowfall exceeds twenty feet, the glacial ice extends down within 4000 feet of sea level; but

Forest Fire on South Bowlder Creek

MONTEZUMA MOUNTAIN

in the Rocky Mountain National Park, where the annual snowfall is less than ten feet, the glaciers do not extend much lower than 12,000 feet above the sea level. As the snow piles up it gradually solidifies into ice, and when the ice attains sufficient thickness it begins to move, if there is any downward path of escape, and becomes a glacier.

Side by side in the park are the two dominating heights, Longs Peak, 14,255 feet high, and Mt. Meeker, a trifle lower. Longs Peak is a vast wild monolith of granite that is usually nearly free of ice and snow. It is a hard day's climb to the summit. There is perhaps no place in the Rocky Mountains where the curious gnarled and stunted trees which develop near timber line can be seen to better advantage than on the side of Longs Peak. They occupy a narrow belt at an altitude of about 11,500 feet. The same species of trees which, lower down, are tall and straight, are here strangely dwarfed and twisted. These stunted trees grow very slowly. The average trunk or branch increases in diameter about an inch in a century; and yet some of the trees have trunks as much as three feet in diameter. The cold is excessive, and the strong winter winds tear the snowflakes into minute ice crystals, and hurl them with such force

that they act in much the same way as a sand blast. They cut the bark from the windward side of the trees, and shear off the tender twigs that have started in exposed places during the previous summer. The prevailing westerly wind bends the trees so that many have the appearance of trying to escape. In some places the trees develop only where they are afforded special protection, such as the leeward side of a bowlder. In this struggle with wind and flying sand, cold, and nine months of snow they seldom attain a height of over eight feet, and many grow along the ground like vines.

Mt. Wilson

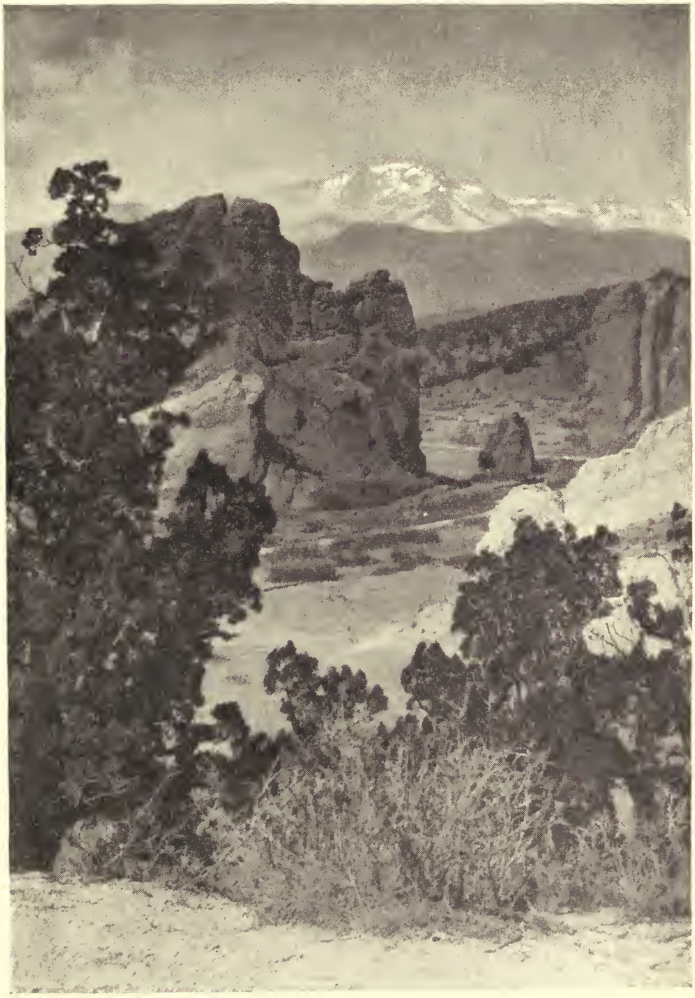
The gentler slopes of the Continental Divide are on the west, a heavily wooded region diversified by gloriously modeled mountain masses, and watered by many streams and rock-bound lakes. On the east side the descent from the main ridge is steep in the extreme. Precipices plunge two or three thousand feet into gorges carpeted with snow

Bluffs of Green River

patches and wild flowers. The cliff-cradled valleys of the park can hardly be excelled for wildness. There are more than one hundred lakes and tarns in the park, most of them in basins of solid rock excavated by glaciers. Chasm Lake, at the foot of the precipitous eastern slope of Longs Peak, is particularly notable for its romantic setting. Many moraines have been left by the old-time glaciers, and one of these deposits is at least a thousand feet high.

Bees hum in the park, butterflies flutter in the sunny air, birds make the forest depths melodious, mountain sheep watch from the cliffs, trout lurk in the streams, and the bark of the coyote is heard after the sun has set. Elk are increasing, deer are common, and there are black bears, foxes, and wolves. In many places are extensive beaver colonies with dams, ponds, and houses. Flowers grow wherever there is a bit of soil for them to live in. Some of the wild Alpine flower gardens are found nearly 13,000 feet above the sea. Fully one hundred varieties of blossoms brighten the ledges, fringe the snow fields, and color the moorlands above the limits of tree growth.

The village of Estes Park, in a valley at the eastern gateway of this mountain playground, has many hotels seven thousand or more feet above the sea level. From them access to the noblest heights and most picturesque recesses of the park is easy. The air is sufficiently rare by reason of height to make running put a person quickly out of breath; and if you attempt to climb the higher mountains you have to move deliberately and stop often to rest. The most comfortable way to travel the mountain trails is on horseback. The guide advises the riders to hold the reins loosely and let the horse pick a way to suit itself. He rides ahead, and the horses ridden by the rest of the party follow, if let alone. You can bivouac by rock and stream in the primeval forest if you choose. For splendid sunny days and cool restful



Pikes Peak from the Garden of the Gods

nights the park cannot be surpassed. A number of railroads run close to it, and it is only thirty hours from Chicago. As many as 50,000 persons have visited it in a single year.

Colorado has seventeen National Forests which cover an area almost half as large as the state of New York. In them are forty of the fifty-four peaks in the United States that exceed 14,000 feet in height. These forests also have in them thousands of miles of the best fishing streams in the country.

Fifty miles south of Denver is Palmer, one of the most celebrated resorts in the state. The Ute Indians, in a legend similar to the account of Noah's Flood in the Bible, tell how a great boat containing all the living creatures that escaped drowning was left by the subsiding waters on a spur of the mountains just back of Palmer Lake. When the animals came forth from the boat they went down on the plain, after the water had receded, and there they dwelt domestically with the human beings. But one day, while the warriors were all absent exploring the country, a cross old woman who had been left in charge of the camp was hindered in her work by the animals getting in her way, and she gave them a furious scolding. They were so frightened that they fled, and since then the Indians have been obliged to hunt them.

The Pikes Peak region has been called "America's Scenic Playground," and its numerous points of vantage that offer wonderful panoramic views have earned it the name of "Nature's Picture Gallery." Pikes Peak itself is probably the best known summit of the Rockies. It rises abruptly from the plains to an altitude of 14,147 feet, and is the most frequently climbed of any mountain in the world of as great height. On a clear day the westbound travelers on the Union Pacific Railroad get their earliest glimpse of the Peak from a station called First View. The mountain is seen one

Balance Rock, Pike Forest

hundred and forty miles away directly west. Its authentic history dates from November 13, 1806, when Lieut. Pike, leading a small exploring party of United States soldiers, sighted the white crest from the far east. Ten days more were required to reach the base, and after vigorous attempts to scale the mountain, Pike abandoned the project with the declaration that "No human being could ascend to its pinnacle." The Peak is an outlying sentinel of the Rockies. It is not heavily snow-capped, but, on the contrary, though the snow gathers in permanent drifts in the ravines, the white mantle as a whole is usually rather scanty and tattered. The upper part of the mountain is a waste of broken blocks of stone. A cog-wheel railroad climbs to the summit, which is nine miles from the village of Manitou at the base, or 8000 feet in perpendicular rise. There is also a recently completed eighteen-mile automobile road that ascends to the top by easy grades, and which is as smooth as a pavement. This is the world's loftiest automobile highway. Many summer visitors go up on foot. They ordinarily start in the evening, because during the day the heat in the narrow chasm which the route at first follows, and the glare of the sun on the rocks, make walking almost out of the question. Each climber carries a blanket and supply of coats and sweaters, for at the summit the thermometer goes down nearly to zero every night. They ramble along happy and talkative till they

get to timber line and pass Windy Point, where a breeze is always blowing. That breeze chills them right through, no matter how much clothing they put on. Many persons, when they get there, find a spot where they can escape from the gale, then make a fire, loaf a while, and go back down. By the time the others who keep on get to the top they are ready to swear that the mountain is ten miles high. At the summit they find shelter in a low stone house. In the morning they are rewarded by a wonderful sunrise, if there are clouds to catch the color.

Centuries before Columbus discovered America the Indians made pilgrimages to the "bubbling waters" at the foot of Pikes Peak, and made votive offerings to the "Great Spirit" in reverence to whom they named the place Manitou. The village, with its sparkling health-giving mineral springs, is in a graceful vale encompassed by cathedral hills. Colorado City, the oldest settlement in the region, was founded in 1859, and was Colorado's first territorial capital. The most important of the group of towns in the vicinity is Colorado Springs, noteworthy for its fine buildings, broad tree-lined streets, and pleasant parks. All these towns have an abundance of pure mountain water, and there are no insect pests. The summers are characterized

Gunnison River Canyon

by blue skies, snow-tempered breezes, comfortable days, and restful nights. The winters are comparatively free from heavy snow and extreme cold. Among the near-by attractions are the picturesque Cheyenne Canyon, the Cave of the Winds with its beautiful crystallized formations, and the Garden of the Gods, which covers about a square mile of rough hills. The growths for which the Gods are responsible and which lend the Garden distinction, consist of a great variety of grotesquely eroded pillars and ridges of rock, mostly of red sandstone, but with an occasional gray upthrust of gypsum. Several of the pinnacled and grottoed ridges are of very impressive size, the highest over three hundred feet; and in the lofty crannies numerous doves and swift-winged swallows have their nests. Down below, the prairie larks sing, and the robins hop about the ground, and you see an occasional magpie. Best of all, you have in plain sight the hoary Pikes Peak and its brotherhood of giant mountains.

Mountain of the Holy Cross

High among the rugged ridges southwest of the peak is the world-famous mining camp of Cripple Creek. The journey thither is forty-six miles by a railroad that follows up canyons, clings along slopes, and progresses by long curves. Much of the time you are in a thin woodland of pines or aspens. The fires have run over a large portion of the heights, yet the timber on the burnt ground is not wholly ruined. In this dry climate decay is slow. A tree killed by the fire and left standing continues sound for tens of years. No doubt trees killed thus half a century ago are now being hauled from the forest to be used as lumber. Cripple

Creek is one of several towns within a radius of half a dozen miles. Serpentine paths and roadways wind up and down the hills, lines of railway cut many a furrow one above the other in the steep slopes, and towering dumps of broken rock from the mines often loom close at hand. The first Cripple Creek dwelling was a log house built by a family of herders in 1872. They had 1500 cattle, which ranged over a territory about eight miles long by four broad. One of the young men of the family fell off the house and was badly hurt, a cowboy while riding a bucking horse broke his leg, and the head of the household, while drawing a pistol to shoot a buffalo calf, discharged the weapon into his hand. These accidents led the cowboys to call the little stream in the hollow Cripple Creek. Presently a Denver clerk, who had scraped together a few dollars, bought a pack of provisions and a donkey, and came into the region prospecting. His third night's camp fire was built against the face of a big rock. He was prodigal with fuel, and the heat of the roaring fire cracked the rock and revealed gold. The Denver clerk discovered an outcropping vein that led into the wonderful treasure vaults of Cripple Creek. That was in 1890. The gold occurs in streaks running from below upward, and the area of pay rock seems to be limited to a patch about three

Glenwood Canyon, Grand River

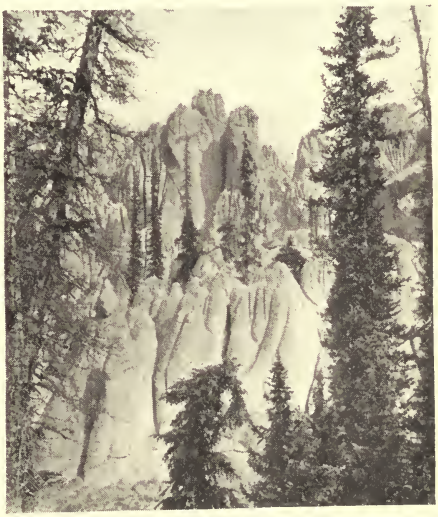
HELEN HUNT FALLS, NORTH CHEYENNE CANYON

miles across, but the country is full of prospect holes for ten miles around. Actual mining was not carried on very vigorously for several years. Most claim owners were content to incorporate companies for a million or two and make money selling stock. Often the claims were wholly worthless. Prospectors still haunt the wilds of the Western mountains, and unexpected discoveries continue to be made, but the world seldom hears of them unless they lead to great bonanzas.

Colorado industries are primarily related to mining, but latterly irrigation farming has made remarkable headway. If you would see such agriculture at its best, journey to Greeley in the valley of the North Platte. The place was founded by Horace Greeley in 1872 as a practical exemplification of his own advice, "Go West, young man, and grow up with the country." The region then was a cactus plain, uninhabited save for two or three isolated ranches, and the sleep of the newcomers was disturbed by the howling of wolves. Now it produces immense crops of orchard, field, and garden staples, and the watered land is valued at from two hundred to one thousand dollars an acre.

The most picturesque passage through the mountains on any of our great transcontinental routes is that of the

Denver and Rio Grande by way of the magnificent Royal Gorge west of Pueblo. The towering cliffs of the gorge form one of the most impressive of canyons, a mile and a half long and 2600 feet deep. The first railroad train passed through it in 1879. This is the gateway to western Colorado, a broken region of tremendous mountain ranges intermitting with many a sheltered pastoral valley. These valleys are called parks. One of them is about as large as New Jersey, and the land is both level and fertile. By turning a little aside from the main route you can visit Leadville in its lofty aerie, over 10,000 feet above the sea. It is sometimes spoken of as the "Town above the Clouds." The boom began here in 1878 when ore remarkably rich in lead and silver was discovered. Then people flocked thither in wagons and on horseback and in stages until three years later the place had 37,000 inhabitants, which is five times its present size. Thirty miles to the northwest is the Mountain of the Holy Cross; but the emblem which gives the peak its name does not appear till nearly midsummer. Then the snow has melted from the high precipices and is only retained in two deep ravines that form a cross. This cross continues in view until the late fall, when the snows



"The Ghosts," Rio Grande Forest

again take possession of the entire crest. To go to the mountain, stop at Red Cliff, a delightful little village with a Swiss-like environment. A somewhat arduous trip of a dozen miles back into the woods brings you into the vicinity of the strangely marked height. Farther west is the well-known health resort of Glenwood Springs in a beautiful valley surrounded by forest-clad hills. Another particularly interesting place is Grand Junction, which has in its vicinity some of the most productive fruit country in the entire Rocky Mountain region.

In Mesa Verde National Park

In the southwestern corner of the state is the Mesa Verde National Park. It is in a dry, warm, level region with thin pine forests. The striking features of the district are occasional picturesque canyons, and now and then a flat-topped elevation, one or two thousand feet high. These elevations are called mesas, which is Spanish for tables. Most of them are arid and bare, but the mesa which is the national park is called the Mesa Verde because it has green woodland on it. All the region was originally on the level of the table tops of the heights, but heavy rains and melting snows have in the passing centuries worn a great deal of the country down to what it now is. The summits of the mesas are of rock harder than any material that lies below, and this rock serves as a protecting cap which prevents the storms from carrying off the soil underneath.

One December day, in 1888, two brothers searching for lost cattle on the Mesa Verde pushed through the dense growths at the edge of a deep canyon, and were amazed to see, on a ledge under the overhanging edge of the opposite brink, the walls and towers of what seemed to them the ruins of a palace. Then they began to explore the vicinity, and near by, similarly placed in another canyon, they found an equally majestic group of ruins out of which grew a large spruce tree. They called the first-found structure Cliff Palace, and the latter Spruce Tree House. These are the most elaborate and best preserved prehistoric ruins in America. In the years that followed, a careful search resulted in numerous other finds of importance, and as recently as 1915 a remarkable Temple to the Sun was unearthed on the top of the mesa. Spruce Tree House contained about one hundred rooms and was three stories high. Probably a colony of nearly four hundred persons made it their home. Cliff Palace had two hundred rooms. The Mesa Verde, fifteen miles long and eight wide, is one of the largest of our mesas. At its base are masses of broken rock rising three hundred to five hundred feet from the bare plains. Above the slopes of shattered rock are sandstone bluffs under whose overhanging tops nestle the cliff dwellings. Life must have been difficult in this dry country when the Mesa Verde communities flourished. Game was scarce and hunting arduous. The Mancos River yielded a few fish. Berries and nuts were gathered, and corn, beans, squash, and cotton were raised. The corn was ground on flat stones, and made into bread that was baked on stone griddles. Water was only found in sequestered places near the head of the canyons. The people possessed no written language, and could only record their thoughts by a few symbols painted on their earthenware jars or scratched on rocks. But their sense of beauty was keen, as is evidenced by their

handiwork in basketry, cotton fabrics, and their ceramics, which they decorated with beautiful designs in rare colors. They were expert builders, they cleared and irrigated land, and they became more civilized than any other Indians in the United States. At length they disappeared. Possibly they were attacked by Indians from the plains, and either destroyed or driven away, but that is only conjecture. A Spanish exploring party discovered cliff dwellings here in 1541, but even then the buildings had been abandoned for a long time. Our Indians of the present shun the ruins of the Mesa Verde, which they believe are inhabited by spirits whom they call the Little People. The park is reached by wagon, horseback, or automobile from Mancos, about twenty miles away.

Kit Carson, greatest of all the frontiersmen, trappers,

Balcony House, Mesa Verde

scouts, guides, and Indian fighters of the far West came to Colorado, after taking an active part in the Civil War, and settled on a ranch near the mouth of Picketwire Creek. He died in 1868 at Fort Lyon, where he had gone to visit a son. Carson was born in Kentucky in 1809, but his father's family moved to Missouri while he was an infant. When he was seventeen years old he joined a party of Santa Fé traders and began his life of adventure on the great plains and in the Rocky Mountains. For sixteen years his rifle supplied every particle of food on which he lived. He married a squaw, and after her death took for his second wife a Spanish lady in New Mexico. He was a quick wiry man, rather under the average height, cool in times of danger, and with nerves of steel. He was wholly uneducated, and could with difficulty write his name. His expertness as a rifleman was amazing. He could toss a silver dollar thirty or forty feet in the air and shoot it before it reached the ground. All the Indian tribes of the region became well acquainted with him. He often visited their camps, sat in their lodges, smoked with them, and played with their children. He was never known to break his word, and they both respected and feared him.

Cows on Jornado Range

XLV

New Mexico

New Mexico and Arizona became states in 1912. They were the last of the forty-eight states to be admitted to the Union. One of the charms of New Mexico is its weather, and the "Sunshine State" fairly describes it. The typical day is absolutely cloudless. The sun makes its journey across the vast blue dome of the sky without the least film of mist to obscure its brightness, and there are three hundred such days every year. To the casual observer much of New Mexico seems a half naked and stony wilderness where only the scantiest population can ever find subsistence. But there is a vast amount of good land that only needs irrigation to make it productive and beautiful; and by utilizing the streams fully and getting artesian water from below the surface the aspect of the region is being materially changed. The climate is cold in the elevated regions, hot on the plains, but everywhere dry and healthful. In the southern part the temperature seldom goes below the freezing point. Heavy rains fall in July and August, but the rest of the year is dry.

The oldest place in the state is Santa Fé. Relics found along the Sante Fé valley show that the region enjoyed its greatest prosperity when it was peopled by the prehistoric

Inscription Rock, El Moro Forest

Aztecs. According to an Indian legend Montezuma was born in this vicinity, whence he journeyed southward on the back of an eagle. The people followed, and at each place where the eagle stopped for the night they founded a city. Finally the city of Mexico was built where the eagle's long flight ended. A great-granddaughter of the Aztec chief, Montezuma, married a wealthy Spaniard, who became the founder of Santa Fé, which, next to St. Augustine, is the oldest town in the United States. In 1598 he started from Mexico with 400 colonists, 83 wagons, and 7000 cattle. He reached the Indian pueblo of San Juan about thirty miles north of Santa Fé, and there he built a town on the west side of the Rio Grande. Not until eight years later did he remove to Santa Fé, where he established his settlement on the site of two small Indian pueblos.

Navajo Church near Fort Wingate

Such was the zeal of the Franciscan missionaries that by 1617 eleven

Old Palace at Santa Fé

churches had been founded in New Mexico, and 14,000 natives had been baptized, yet there were only forty-eight soldiers and colonists in the entire province. The government expenses were borne by the Indians, who paid an annual tribute of cotton and corn in return for their teaching and "civilization." Many of the natives were hanged from time to time for alleged religious offenses, and many were whipped and imprisoned until a medicine man of San Juan pueblo persuaded all the northerly Pueblo tribes to unite to exterminate the Spaniards. The day of reckoning came on August 10, 1680, when more than 400 of 2500 settlers, soldiers, and friars of the province were massacred. Santa Fé was not disturbed until four days later, when the enemy entered the town. A parley was held with a deputation of Indians who bore a white cross of peace and a red cross of war. They gave the Spaniards their choice of these, but if the former was chosen the country must be evacuated immediately. The whites failed to soften these terms, and fighting ensued which resulted in the entire population of 1000 persons taking refuge in the great adobe palace. Only one hundred of them were armed. The water supply of the town was cut off, and by the twentieth of the month the besieged were in such desperate straits that the Spaniards made a sortie. By this time there were 3000 savages beleaguering the palace; yet the brave one hundred drove the foe in confusion to the heights that bordered the valley, killed three hundred, and captured

fifty whom they afterward hanged on the plaza. But they did not dare to remain, and the next day they gathered up their belongings and started on a six-weeks march under the hot summer sun down the river to the Mission of Guadalupe, near the present El Paso, Texas.

Now the Pueblos were in possession of Santa Fé and of the dearly bought independence which they had so long been craving. They determined that the language of the white men was to be forgotten and his religion discarded. Until 1692 they had things their own way. Then the Spanish governor led a force up the Rio Grande from El Paso and induced the Indians in the Santa Fé vicinity to surrender and to renew allegiance to the Spaniard's religion. In December of the next year he returned with a colony of seventy families, but the Indians refused to vacate the town buildings until they were attacked and overpowered. Four hundred of the women and children were distributed among the colonists.

When Lieut. Pike visited Santa Fé in 1807 the palace was there as it is now, and was the only building in New Mexico that could boast the luxury of glass windows. In 1847 the New Mexicans had their first opportunity of becoming acquainted with a sawmill. The mill was placed in operation on

Pooya Cliff Dwellings

Santa Fé Creek. The first railroad to reach the city arrived in 1880, and thenceforth the rumble of the long caravan rolling its weary way into the crooked streets of the "City of the Holy Faith" was forever stilled.

The Old Palace has been occupied as executive building by a succession of almost one hundred governors — Spanish, Pueblo, Mexican, and American — some of whom held sway over a territory larger than the original thirteen states. It was built in 1606, and is without doubt the oldest governmental building in our country. The structure is essentially unchanged, and probably no walls within our domain have witnessed inside and out such cruelty and horror, treachery and suffering, valor and chivalry, as the big low adobe palace which fronts the historic plaza. In one of its rooms Lew Wallace, when governor of New Mexico, wrote a part of his famous novel, "Ben Hur." It contains a museum of old Spanish paintings and historical relics.

Only one year less ancient is San Miguel Church, believed to be the nation's oldest religious edifice, and known as the "Cradle of Christianity in America." It is still used for public worship. The original adobe walls were made extremely thick, which accounts for their survival in spite of what the building has had to endure from mankind and weather. In the Pueblo Revolution the Indians tore down the ornaments of the church and burned them, and they used the building for their ancient worship of snakes and stone images. The restoration of the damaged structure was completed in 1710.

Sanctuario, the Lourdes of New Mexico

The Church at Laguna

Inside of the venerable church is a bell cast in Spain more than a century before the discovery of America. Near by, on the crookedest street in the United States, is a house which tradition says was built by Pueblo Indians long before the Spanish occupation. It has been continuously occupied since, though not without some change and renovation.

Santa Fé is on a plateau that has an altitude of about 7000 feet, and the summer weather is invigoratingly comfortable rather than hot, while the winter weather is seldom severe. The plateau is rimmed by peaks, over thirty of which are from 10,000 to 13,000 feet high. Santa Fé itself is on the whole sleepy and ancient-looking, with streets that are often so narrow as to be like paths among the jutting irregular fronts of adobe buildings. But there are modern structures side by side with the primitive ones, and the recent and the antiquated offer curious contrasts. The plaza has evolved from a barren common to a bower of beauty. Sometimes you may see on the streets a great heavy oxen-drawn cart with wheels that are thick disks of wood creaking on a wooden axle. Another odd sight is an occasional drove of donkeys, each bearing more than its bulk of cordwood or hay, and all driven by an Indian or a Mexican. Round about are coal, gold, copper, mica, zinc, and lead mines. The gently undulating hills that roll away in every direction form excellent grazing lands, and are occupied by flocks of sheep and herds of cattle and goats.

Acoma Pueblo

Santa Fé is the center of what has been called the most wonderful fifty-mile square in America. In a single day's journey you can reach Indian pueblos and Mexican villages, cliff dwellings and other prehistoric ruins, snow-clad peaks, and trout streams. You can motor over smooth highways, or hunt the bear and the mountain lion, or take long camping trips on horseback with pack outfit and rough it to any extent desired.

Remnants of the ancient civilization of the Cliff Dwellers are scattered around Santa Fé with astonishing prodigality. Six miles to the south, on the Arroyo Hondo, are the ruins of one communal village. Five miles to the southwest, at the curious sprawling Mexican settlement of Agua Fria, is a similar prehistoric village beneath a mound that is strewn with thousands of pieces of ornamental crockery. Six miles to the north are similar ruins. But all these are negligible compared with the 20,000 communal and cliff dwellings in Pajarito Park, across the Rio Grande, twenty-five miles west of Santa Fé. Here is the most interesting archæological region in the United States. In untold ages past, when the pioneer Cliff Dwellers sought out this secluded area, they made their homes in the many natural cavities of the rocks. But as the population increased, no more natural shelters were to be had, and the people were obliged to fashion for

themselves new caves, which they dug with their rude stone tools in the soft volcanic rock of the cliffs. Every cliff wall in the canyons is honeycombed with these artificial caves. If you enter one of the tiny doorways you find yourself in a room from six to ten feet square, with plastered walls and floor as hard as cement. The caves contain fireplaces, granaries, and other reminders of domestic life, and the blackened ceilings speak of long occupation. Many of the walls are crudely decorated with pictures of plumed serpents and all manner of mythical beasts and personages. The cliffs themselves are adorned with a multitude of primitive symbols which the aboriginal sculptors cut in the rock ages before America was discovered. Carloads of pottery and utensils have been taken away to enrich museums and private collections, but the amount is negligible compared with what remains. One ruin is that of a communal house with a thousand rooms, and which is almost inaccessible except for a single stairway. The cliff-dwellings have the appearance of fortified retreats, and it is generally agreed that the region was at one time invaded by warlike hordes whom the inhabitants were unable to resist in the open country. The assailed were therefore led to devise these dwellings hung between earth and sky, but what were their struggles and what their fate we do not know.

Thirty miles north of Santa Fé is the Española Valley, the garden spot of New Mexico, with orchards and rural settlements and Indian villages. About ten miles east of the town of Española is Chimayó, one of the most secluded villages in the state. It is among the foothills of the western side of the main range of the Rocky Mountains. Here, under the shadow of the heights, is a unique church known as the "Sanctuario." It is a shrine for the cure of disease, and every day throughout the year, men, women, and children from all directions may be seen approaching in car-

riages, in wagons, on horses, on burros, or on foot, seeking a cure for their bodily ills. As many as one hundred pilgrims often arrive in a single day. The earth of this sacred spot has been reputed to have healing virtues from a very remote past. In 1816 the church, with its massive walls over three feet thick, was built by a wealthy local citizen. The usual method of obtaining benefit is to take a small amount of the sacred earth, and make a kind of tea of it. One spoonful of this frequently suffices to produce the desired result. Many persons all over the Southwest attribute their present good health to the benignant influence derived from a visit to Chimayó.

Somewhat farther east is North Truchas Peak, 13,306 feet high, the loftiest mountain in the state. About fifty miles to the north is Taos, once celebrated for its distilleries of whisky, a raw fiery spirit known as "Taos lightning." This liquor was the most profitable article of barter with the Indians, who exchanged their buffalo robes and other valuable furs for it at a tremendous sacrifice. Kit Carson lived at Taos from 1854 to 1860, and, in accord with his desire, he was buried in the Taos Cemetery after his death.

Twenty miles east of Santa Fé are the ruins of Pecos, the largest place in what is now the United States when visited by the Spaniards in 1540. It was a walled city whose inhabitants were self-reliant and warlike. Pueblo civilization had here its eastern outpost, and the place was exposed to attack by the Plains tribes. Not far from Pecos is Las Vegas, which has won favor as a pleasure and health resort. Here are about forty hot springs, which afford opportunities for both mud baths and water baths, as well as for drinking.

The state's largest city is Albuquerque, with a brisk trade in wool and hides. Near it is the important pueblo of Isleta, and farther west is the pueblo of Laguna. There are at least a score of the many-chambered

communal pueblos in the state, and their inhabitants own more than a million acres of land. Laguna is particularly interesting and accessible. But the most remarkable of all is Acoma, which is eighteen miles south of Laguna. The name means "People of the White Rock." Acoma is on an isolated mesa with precipitous walls of gray sandstone that rise to a height of three hundred and fifty feet above the plain. It is the oldest continuously inhabited settlement in the United States. The early chronicles say it was the home of a people feared by the residents of the whole country around as robbers. Its location rendered it well-nigh impregnable, for the only means of approaching it was by climbing up an easily guarded cleft in the rock. The Acomas welcomed the soldiers of Coronado in 1540 with deference, ascribing to them celestial origin; but later, after becoming aware of their distinctly human character, they slew a dozen of them. By way of reprisal seventy of the Spaniards attacked the citadel, and at the end of a three days' hand-to-hand struggle had slain 1500 of the Indians and stood victors on the height. The present population is about 600.

Hooded Knight, Gila Forest

Only three miles distant is the Enchanted Mesa, a vast castle-like rock rising with perpendicular walls from the plain to a height of four hundred and thirty feet. Its great size and ragged crags make it one of the most impressive wonders of the continent. According to legend there was

formerly a pueblo on this mesa to which people climbed by a path up a crevice where a huge portion of the face of the precipice had partially separated from the main mass. One day, while all the inhabitants except three sick women were at work in the fields on the plain below, there came a sudden storm, and the deluge of rain, or the lightning, sent the leaning ledge crashing down to the base of the mesa. The three sick women perished beyond reach of aid on the then inaccessible cliff, and the rest of the community sought a new place for their village. Several exploring parties in recent years have been to the summit of the great rock. The first of these, led by an Eastern college professor, laid siege to the mesa with a mortar and several miles of assorted ropes, supplemented by pulleys, a boatswain's chair, and a pair of horses. On top is an area of twelve acres that is almost bare rock. The explorers find there bits of broken pottery, stone axes and arrowheads, and ornaments made of wild hogs' tusks, but no indications that the mesa served for anything more than a refuge for small parties.

Zuñi, with a population of 1600, is the largest of all the

The Enchanted Mesa

southwest Indian pueblos. It is on an open plain near Thunder Mountain. The adobe houses, built in communal fashion, rise in some instances five stories high. The people are noted as pottery makers, yarn spinners, and turquoise drillers. Their ceremonial dances are world-renowned. Near Zuñi is the precipitous-sided mesa of Toyalane to which the Indians of Zuñi and of six other pueblo cities inhabited by the tribe fled when they feared invasion. There they sometimes remained for many years while their abandoned pueblos fell to ruins. The pueblo of Zuñi is forty miles south of Gallup, which is also the starting point for making a trip across the Painted Desert, seventy miles, to Chico, where is the largest group of prehistoric stone houses in the southwest.

NAVAJO INDIANS ON THE RIM OF THE GRAND CANYON

XLVI

Arizona

Arizona is an Indian word which means "Sand Hills," but the Arizonans prefer to have you think of the state as "Sunset Land." Only seven per cent of its area is privately owned. The remainder is public land, Indian reservations, and National Forests. Arizona leads all the other states in the production of copper. The state's largest city and its first permanent settlement is Tucson, a quaint Spanish-looking place founded about 1695. A few miles to the south of Tucson is an old mission church, erected at the same time, in which services are said never to have ceased.

The climate of Arizona varies from that of the hot region near Yuma to that of the cold forested mountains and high plateaus. In the more elevated portions the rainfall is

scanty, and about sixty per cent of the days are cloudless. Yuma, which is in the southwestern corner of the state only seven miles from the Mexican frontier, was established by Spanish missionaries in 1700. The desert in this part of Arizona, along the Colorado River, is the hottest section in the United States. Indeed, it is even hotter than many parts of the torrid zone. The thermometer registers as high as one hundred and twenty degrees in the shade. The great deserts of Arizona and the adjacent states offer little to attract settlers, and the pioneers of a few years ago regarded them with fear as places of desolation and death, yet these now serve as pastures at the rate of one or two square miles for each cow. Wild life is more abundant on the desert than you might fancy, but the animals are small and not often in sight. Most of them are nocturnal. Large colonies of rats live in the sandy areas; and various lizards and the bold little horned toad are numerous. In places the species of rattlesnake known as "sidewinder" is found. The name refers to the creature's sidelong method of locomotion. Tortoises roam widely over the desert, and their empty shells are a common sight. Most of these tortoises are about ten inches long. They are generally found far from water holes, and it is a marvel that they can obtain water enough to keep them alive.

Pinto Canyon

By means of vast irrigation projects the government is making much of the once arid worth-

Giant Cactus, near Yuma

less lands of the West fruitful, and the limits of the Great American Desert that used to be such a big blank patch on the maps are becoming ever narrower. In the first ten years after 1902, when the Reclamation Act was passed, irrigation water was made available for more than a million acres. Of all the irrigation projects that on the Salt River in the vicinity of Phœnix, the capital of Arizona, is the most highly developed. Phœnix is a well-built modern city, and the irrigated valley is amazingly fertile and productive. Practically all the land that can be watered is in use, and 90,000 acres are in alfalfa. Other important crops are sugar beets, cereals, cotton, melons, and small fruits. Dairying is an important industry. The average farmer has forty acres. Without irrigation the land could be bought for twenty

Water Bottle in the Desert

dollars or less an acre. With irrigation it sells for one hundred dollars. The vast precipice of masonry known as the Roosevelt Dam, which has been thrown across the narrows of Salt River Canyon, in a setting of wild mountain grandeur, is one of the most remarkable engineering works of our time. The maximum height of this barrier is two hundred and eighty feet, and on its crest is a broad driveway nearly a quarter of a mile in length. Over the spillways thunder mighty waterfalls whose clouds of rainbow spray fill all the lower canyon. On either side rise the great cliffs, and if you look up to the higher ledges you see thousands

Salt River Project Canal

of swallows swarming about their nests, but sometimes scattering wildly before the rush of great vultures that swoop down from the crags. The dam was completed in 1911. Not until four years later, however, did the reservoir fill, thus creating one of the largest artificial bodies of water in the world. The lake is thirty miles long, four miles wide at its broadest, and is completely walled in by mountains. The water that the reservoir contains when full could prob-

ably be depended on to irrigate all the farms in the valley for five years even if no drop of rain should fall.

Apache Indian Camp

One of the most interesting excursions that can be made in Arizona is the one hundred and twenty-mile automobile trip over the Apache Trail. The eastern terminus is the copper town of Globe where you leave the Southern Pacific Railroad, and the western terminus is Phœnix. Just before reaching Globe the train passes through San Carlos, the present home of the Apaches, where can be seen the picturesque red men on horseback and on foot, wrapped in brilliant-colored blankets, and the women selling handmade baskets. The several bands number in all about 5000 persons. Their houses are of a low oval form made of poles covered with interlaced grasses and canvas. Here are the White Mountains, a land of clear streams, pines, meadows, and a

The Roosevelt Dam

Superstition Mountains

cool summer climate, and where such wild game is found as bear, deer, turkey, and mountain lions. The persistent enmity of the Apaches greatly retarded the development of Arizona up to 1886. The Apache chief, Geronimo, with only twenty warriors, and hampered by fourteen squaws, once held at bay an American force of 2000 soldiers, and a Mexican army of several thousand more. He murdered, burned, scalped, and pillaged, and completely terrorized that entire section of Arizona and Mexico, all without losing a single man. But in 1886 Gen. Miles and his troopers followed Geronimo's band into the mountains, giving them no rest and forcing them to keep moving until even their dogged endurance could endure the strain no longer, and they surrendered.

The Apache Trail has been converted into a road graded and smoothed to as near perfection as a mountain road can be. The Indian moccasin trail is followed closely. Much of it is through a wonderful realm of crags and turreted

heights dyed in tints of red, purple, green, and blue. At one place are cliff dwellings. The Indians speak of the prehistoric inhabitants of these dwellings as the "Little People," and such they must have been, for the ceilings are only four feet high, and the doors are only two feet high. You pass the great Roosevelt Dam and Lake, and go on down the turbulent Salt River. Among the features of interest here are Fish Creek Canyon, the beetling Cape Horn, the Old Woman's Shoe, Niggerhead Mountain, and Superstition Mountains. Near the summit of the last is a horizontal line of white rock which the Indians say marks the height reached by the waters of an ancient flood that covered almost the entire world. One of the strange drought-resisting growths along the way is the weird giant cactus. It sometimes stands singly, and sometimes in groves that spread over plain and mountain side. Thirty feet is no uncommon height for it to attain, and some rise more than fifty feet. From the spiny fluted trunks issue branches which almost equal the trunk itself in diameter. This monstrous cactus brings forth a brilliant red waxen flower of singular beauty — the state flower of Arizona. You will see various other cacti, and the Spanish bayonet or yucca, the mesquite, and the cat's-claw growing in dense profusion. After every refreshing shower there spring up short-lived flowering plants that carpet the desert with a mass of color. Indeed, the desert is like a wizard's garden in its mingling of the grotesque and beautiful.

Casa Grande Ruins

Eagle Rock Monument

About twenty-five miles southeast of Phœnix is the Casa Grande Ruin Reservation. Here is the most important prehistoric Indian ruin of its type in the Southwest. One hundred rooms with plazas and surrounding walls have thus far been excavated.

Up near the Santa Fé Railroad, not far from the New Mexico line, are several petrified forests. They contain vast deposits of petrified wood varying in size from tiny fragments to trees more than six feet in diameter and two hundred feet in length, and they cover thousands of acres. One of these forests is only six miles from the railway station of Adamana. It is noted for the brilliant colors of the petrified wood and for its Natural Log Bridge. This bridge spans a chasm sixty feet wide with its jasper and agate trunk. A neighboring petrified forest in which the colors comprise every possible tint is called the Rainbow Forest. Another is known as the Blue Forest on account of the blue tint of its trees. These forests can be easily reached every day in the year except when heavy rains render the streams temporarily impassable. The trees in most of them lie prone on

Petrified Forest

Bottomless Pits near Flagstaff

the ground, broken into sections in what was once the bed of an ancient river. Many of them retain their bark. There are certain slopes where they lie tumbled together as if whole quarries of marble and onyx had been dynamited, and the sections of a tree seldom lie in line in their original positions. Commercial exploitation of the petrified wood is improbable because it is so hard as to almost defy polishing by machinery.

Fifty miles west of Adamana is Winslow at the south end of the Painted Desert. This desert is a district of undulating plains and bright-colored cliffs which extend far northward into Utah. About sixty miles north of Winslow are the seven "Sky Cities" of the Hopi Indians perched on three mesas that project into the Painted Desert. Below the villages are cornfields, peach orchards, and gardens. Each village has its own spring and its own shrines. The Snake Dance which occurs in late August is one of the most interesting of the Hopi ceremonies. The women of the tribe make the finest pottery in the Southwest, and the men are famous blanket weavers. There are about 2000 persons in the tribe. The name Hopi means "Peaceful Ones." Much to their disgust other Indians sometimes derisively call them Moki, which means "Dead Ones." They are intelligent, thrifty, hospitable, and frugal. Their lives are full of toil to raise crops in the arid region, and full of prayers and

religious ceremonies largely intended to persuade their gods to send water for the crops.

In the northeastern part of Arizona, and extending over into New Mexico, is the large reservation of the Navajo Indians, who number about 30,000. This reservation exceeds in size the combined area of the three states of Massachusetts, Connecticut, and Rhode Island. Most of it is above an altitude of 6000 feet. The people are pastoral, and own large flocks of sheep and herds of cattle and goats. The men and boys tend these animals, raise a few crops, and make silver ornaments; and the women weave and sell many blankets. In general they are jovial, truthful, and intelligent, and they are among the most industrious of the Indian tribes. Formerly they were one of the predatory savage tribes, the terror of the Pueblo people and their ancestors. After the acquisition of the Southwest by the United States, they killed many citizens, especially when the

Sheep near Flagstaff

frontier troops were withdrawn to participate in the Civil War. It is estimated that the warfare against the Navajos and Apaches from 1849 to 1886 cost the United States $50,000,000.

Well toward the western side of the state on the Santa Fé route is Flagstaff, which derived its name from a pole erected by a party of immigrants who camped near by and celebrated the Fourth of July. It is about 7000 feet above sea level, and is a summer vacation place for Arizonans. The town has several big lumber mills, and is the site of the Lowell Observatory, renowned for its investigation of the planet Mars. The San Francisco Mountains lie just north of the town. Their peaks are visible from points within a radius of two hundred miles, and one of them, with an altitude of 12,611 feet, is the loftiest height in the state. Eight miles southwest of Flagstaff is Walnut Canyon, a rent in the earth several hundred feet deep and three miles long, with steep terraced walls. On the sides of the canyon, under projections of the terraces, are scores of cliff dwellings. Sunset Mountain, sixteen miles northeast of the town, is an extinct volcano which rises a thousand feet above the country round about. It gets its name from a sunset glow radiated by the reddish cinders with which it is tipped. The crater on top is two hundred feet deep and half a mile across. In the depths of the crater are caves where ice is found in the hottest part of summer. About forty miles east of Flagstaff is Crater Mound, perhaps the most mysterious geologic feature in the West. It is a circular ridge from one hundred to one hundred and fifty feet above the level of the plain, and this ridge, which consists of loose fragments of rock and sand, incloses a great hole six hundred feet deep and four thousand feet across. Some persons have thought that the hole was made by the impact of a great meteor, and a mining company was organized to find and work the huge mass of meteoric

iron supposed to be buried in the hole. However, a boring one thousand feet deep failed to reveal a trace of the meteor. Probably the hole is the result of an explosion of steam from volcanic forces below.

Natural Bridge near the Haystack Rocks

Thirty-five miles west of Flatstaff is Williams, near which is the Bill Williams Mountain, over 9000 feet high. The mountain was named after a famous scout who was killed by the Indians fifty miles to the south. It can be ascended by an easy bridle path. From Williams a branch railway runs nearly due north sixty-four miles to the Grand Canyon. In the depths of the canyon flows the Colorado River, which, with its tributaries, gathers the waters of 300,000 square miles. In Arizona it flows through a thousand-mile series of twenty vast canyons, most of which have only a short break between. The Grand Canyon, monarch of all, is the third, counting upstream. It is an enormous gulf in solid rock, two hundred miles long, four thousand to six thousand feet deep, and with a width of from seven to fifteen

Tumacacori Church

miles at the top, but less than a thousand feet at the bottom. The canyon is a masterpiece of rock erosion — the handiwork of the river during long ages. Not only has the débris-laden water cut the channel but it has also disintegrated and carried away the thousand-fold more of material that tumbled into it from the ever caving walls, which, as a result, rise in a series of shattered inclines with here and there a vertical section. These cliffs are like huge steps, each three hundred to five hundred feet high, and the intervening slopes mark the outcrop of softer rocks. Down in the depths is a narrow inner canyon cut a thousand feet or more into the hard underlying granite and gneiss. Each of the strata has an individual color. Many of the layers are brown or red, while others are gray, yellow, or green. The canyon is in a comparatively level and arid plain, desolate and uninhabitable. The tributary streams of the Colorado come from regions subject to cloudbursts and mighty floods. Great quantities of earth and rock and uprooted trees rush like an avalanche into the main stream from the side canyons. Lodged driftwood over one hundred feet above the ordinary water level indicates the magnitude of the wild floods. The process of excavation is still in active operation. It will continue until the river reaches so low a grade that it can no longer move the débris. Then the side streams will cut away the adjoining walls, and the canyon will widen until its sides become gentle slopes. But this is likely to require a million years or more. The gorge is filled with mountains, some of them five thousand feet high. Perhaps nowhere else is the crust of the earth's surface so exposed to view. During one period of volcanic activity a number of lava streams burst into the canyon through the walls, and others flowed over the brink. They filled it to a depth of about five hundred feet for a distance of sixty miles, but much of this lava has since been eroded away.

The Grand Canyon and Colorado River

The Indians have a legend concerning the creation of the canyon. It tells how a god came to a chief who mourned the death of his wife, and offered to prove to him that she had gone to a happier land than her earthly home. Then the god clove a deep trail through the wild high plains that separated earth from heaven, and thus created the Canyon of the Colorado. He led the chief up this trail to the realm of joy and let him look on his wife's happiness. When they returned, lest the unworthy should find their way to heaven, the god turned a great surging river into the trail.

The first white men to see the Grand Canyon were Cardenas and twelve companions who were guided there from Tusayan by Hopi Indians in 1540. They remained four days on the rim looking in vain for a way to descend. Then they turned back to join the main expedition under Coronado. A government party visited it in 1859, and the officer in charge closed his report with the statement that "Ours has been the first and will doubtless be the last party of whites to visit this profitless location. It seems intended by Nature that the Colorado River, along the greater portion of its lonely and majestic way, shall be forever unvisited and undisturbed."

The river descends nearly a mile in its course through the Arizona canyons, and it was believed that not only were there impassable rapids and falls, but that in places the stream flowed along under ground. Thus, to attempt its navigation was to court death. But in 1869 Major John W. Powell undertook its exploration by going down it with nine men in four boats. He started on the Green River in Utah. One of the men presently left and returned to civilization. Three others, after holding out against the terrors of the trip for many weeks, decided they would prefer to encounter the perils of the unknown desert. Unfortunately, when they climbed out on the plateau, they were ambushed and killed

© Fred Harvey

HERMIT CAMP IN THE GRAND CANYON

by hostile savages. Their comrades completed the trip in safety, though with frequent capsizings in the hundreds of rapids, and narrow escapes from drowning, and the loss of two boats. Of the many other attempts since to go through the series of canyons scarce half a dozen have succeeded.

At one place on Major Powell's voyage he discovered a little stream of clear water joining the muddy current of the river, and because of the purity of the water he called the stream Bright Angel Creek. This gave the name to the trail on the opposite side of the river which ascends to the railroad terminus on the verge of the canyon. Visitors began to come thither soon after 1882, when the Santa Fé railroad was completed, but the long rough ride to get there, and the expense, were serious deterrents. Nothing like crowds came till 1901, when the branch railroad to the Bright Angel Trail

superseded the old stages. The steep winding trail is seven miles long. A vigorous person, accustomed to rough walking, can descend to the river and return on foot, but most people find a horse a necessity. April and May, and October and November are the best months for cultivating an acquaintance with the canyon. In summer, although the heat at the rim of the chasm is not often oppressive, the depths get very hot. The winter weather is bleak and disagreeable, but the effects given by clouds and snow under the brilliant skies are enchanting. It is especially desirable to see the canyon when there is a full moon. The canyon, as it appears with the light falling into it, harsh, direct, and searching, is great, but not beautiful. But the clouds and the sunset and the storm transform it and confer a marvelous splendor. You find an astonishing range of climate in the chasm. On the rim there may be a winter day with a snow-covered ground, but a descent to the river gives a change that approximates a southern journey of two thousand miles. Flowers bloom in the lower parts every month in the year. The Bright Angel Trail follows the course of a very old Indian footpath. Half way down are the Indian Gardens where a spring has made an oasis formerly utilized by the red men. Of the several other trails into the canyon, Grand View Trail, thirteen miles to the east, is the most notable.

At the Foot of Bright Angel Trail

WINTER IN THE YOSEMITE

XLVII

California

California is a Spanish name which means Hot Furnace. This is far from being accurately descriptive except of some of its desert portions. It is popularly called the "Golden State." The people are nicknamed "Gold Hunters," which refers to the "Forty-niners" who came in 1849 from all parts of the world to California seeking fortunes in its gold-bearing sands. Only Texas among the states exceeds it in size. It has a thousand-mile coast line which is remarkably free from indentations. If transferred to the Atlantic coast, it would extend from New York to Florida. The climate varies greatly from place to place. Typical desert conditions prevail in parts of the southern portion, while the weather in the northern coast region is moist and equable. Hot dry

summers and moderate winter rains are characteristic of the great interior valley. Snow rarely falls except in the high mountains. California is most delightful after the rainy season is past, in the three spring months. By the end of February billows of wild-flower bloom begin to spread across the landscape, but by June the countryside has sobered to bronze and yellow. In all parts of the state the winter mornings and evenings are crisp or raw. The rains are gentle, and fall more often at night than in the daytime. Continuous rain when the sun remains hidden all day is rare, even in the rainy season. In the variety and value of its fruit crops California has no rival in the United States. It excels especially in oranges and other citrus fruits. Of its mineral products petroleum ranks first, and gold next. No other state produces as much of either.

National Forests comprise about one quarter the area of the state. Their primary purpose is to provide a self-renewing timber supply and a regulated stream flow; but visitors are welcome, and the forests are being used more and more as the nation's playgrounds. Camping, hunting, fishing, and trapping are free, and so are prospecting and mining. Dead

Golden Trout Creek Falls

timber can be used for fuel by travelers and campers. Special care must be taken by sojourners in the Forests not to contaminate the springs or creeks, for these furnish water for campers and settlers below. If you light a match in the woodland be sure it is out before you throw it away. Make certain by pinching it. Throw pipe ashes and cigar or cigarette stumps where you can stamp out the fire.

Summit of San Jacinto Peak

Inyo National Forest

Never throw them into leaves or dry vegetable matter. Your camp fire should be small. Build it in the open — not against a tree or log, or near brush. Scrape away the trash from all around it, and construct a fireplace by digging a hole or piling up rocks. That makes the fire draw better and is also safer. Never leave a fire, even for a short time, without quenching it with water and then covering it with earth. Fires are reported

mainly by lookouts located on commanding peaks, where they remain continuously on duty. As soon as a fire is discovered by the mountain watcher, he telephones or signals to the ranger in whose district the fire is located, and immediate steps are taken to put it out. Promptness is a chief necessity, and the present system of dealing with fires

The Whaleback and Roaring River

has resulted in keeping the majority of them to an area under one quarter of an acre, and requiring only one or two men to handle them. Where large fires occur fire fighters are recruited from near-by ranchers, stockmen, and lumbermen, and even from settlements outside. Campers are responsible for most of the fires. Each forest ranger has an average district of 60,000 acres. The rangers assist in enforcing the game laws and destroying predatory

animals. They kill yearly in California about eight hundred mountain lions, coyotes, and wild cats. The principal game animal in the state's National Forests is the black-tailed deer. Probably 15,000 deer are killed annually by hunters, and a somewhat larger number by mountain lions.

Eagle Falls near Lake Tahoe

California's first settlement was a Mission established at San Diego in 1769 by a little company of monks, whose leader was Father Junipero Serra. Twenty other California Missions were organized during the next fifty-four years. Their purpose was to convert the Indians to Christianity, and to teach them cleanliness, agriculture, and the crafts. It was a difficult task, for the natives were degraded and indolent, and they sometimes massacred and burned, but on the whole they and the monks got along very well together. The Missions received wayfarers who arrived, either mounted or on foot, seeking a night's hospitality. Fine gentlemen were housed in the priests' quarters, and those not so fine in the arched wings where the Brothers slept. Food and a bed were free to all, but each departing guest, if able, left an offering on the chapel altar. If, however, his saddlebags and purse were empty the Fathers

saw that he had meal and money to go on with, and perhaps a rush-braided flagon of Mission wine. When there began to be ranch houses on the plains their Spanish and Mexican owners observed this same hospitality.

Dolores Mission, San Francisco

One of the Franciscan Missions and a Spanish military post known as a presidio were established on the site of San Francisco in 1776. The presidio was beside the Golden Gate and the Mission three miles southeast. Sixty years later the settlement of Yerba Buena, a name that means the Pleasant Herb, was begun by a little cove southeast of Telegraph Hill. The name San Francisco was applied to all three settlements. There were less than a thousand inhabitants in May, 1848. The place had a school, and it had a newspaper, the first issue of which, printed on paper that the Spaniards used to wrap their cigarritos, had appeared two years previous. Then came the finding of gold and there was a stampede to the region where it had been discovered. Soldiers and sailors deserted, the school closed, and the news-

Looking out of the Golden Gate from the San Francisco Fishermen's Wharves

paper suspended. Business was at a standstill. But a few months later the bare brown hills and curving shores of San Francisco were whitening with tents, goods were piled high in the open air, and the drowsy Spanish town had expanded into a tumultuous little city. Everywhere were springing up nondescript lodging and boarding houses, drinking resorts, and gambling saloons. Crowds of people slept wedged together on floors and tables, in rows of cots, or in bunks fastened in tiers to the walls. The streets of sticky clay or deep sand were thronged with struggling horses, mules, and oxen, and by crowds of men of many nationalities and all levels of life, who jostled by, laughing, railing, or cursing. Workmen charged twenty dollars a day, flour was forty dollars a barrel, eggs were a dollar apiece.

Forces both of good and evil streamed into the city, and naturally came into collision. The population found itself removed from well-nigh all restraints. A series of unpunished crimes roused the public. Many fires, doubtless of incendiary origin, devastated the city. Over a hundred murders occurred in a few months, and not a single capital punishment followed. Presently, in 1852, a party of prominent citizens organized that spectacular popular uprising known as the Vigilance Committee, as a defense against the allied rabble. The same night an ex-convict was

Muir Woods

Mt. Shasta

seized in the act of stealing. He was tried at once by the Vigilants, convicted, sentenced, and hanged in Portsmouth Square. The committee went on investigating and punishing. Evil-doers were terrified, and crime rapidly diminished. At the end of thirty days the activities of the Vigilants were no longer needed. But a few years later the old suppressed crimes again leaped into eminence, and came to a climax in 1856 when a crooked politician named Casey fatally wounded with his revolver James King, editor of the *Evening Bulletin*, near the corner of Washington and Montgomery streets. During King's funeral a gallows was raised in front of the Vigilants' rooms on Sacramento Street, and there, under guard of "3000 stand of muskets and two fieldpieces," with an onlooking throng, Casey and another murderer were hung. This ended the second reign of vice.

The earliest regular overland mail communication with the East was established by pony express in 1860. Postage

© *C. M. Redding*

Mt. Lassen Volcano

was five dollars for half an ounce. In 1869 the first transcontinental railroad was completed.

The city suffered from severe earthquakes in 1839, 1865, 1868, and 1906. On the last occasion the property loss constituted one of the great catastrophes of history. The shock occurred at about five in the morning of April 18 and lasted scarcely a minute. Streets cracked, chimneys fell, and the city hall became a mass of ruins. But the damage would have been comparatively slight had not the water mains been broken, so that the fires which immediately started could not be checked. The flames raged for three days, and a large part of the city, including most of the business section, was destroyed. About five hundred persons lost their lives, and the property damage was nearly half a billion dollars. Yet within three years the city was practically rebuilt. As it is now it is unrivaled in its modernity, and it continues to be the largest place on the Pacific Coast.

The city is beautifully situated at the north end of a peninsula with the ocean on one side and on the other the Bay of San Francisco, one of the most magnificent land-locked harbors in the world. The bay is about fifty miles

long. Its entrance is through the Golden Gate, a strait which is a mile wide at its narrowest point. On Telegraph Hill in the northerly part of the city stood the semaphore which signaled the arrival of ships in the days of the gold seekers. Most of the level land in the business section has been made by filling in the bay. Some of the streets are amazingly steep, and the cable-propelled street cars that climb and descend them are a distinctive feature of the city locomotion. Fantastic old Chinatown was utterly effaced by the great fire, and San Francisco said the yellow men should never reëstablish themselves. But Oriental tenacity won, and the new Chinese city of 10,000 inhabitants has features of considerable interest. The junction of Market with Kearny and Geary streets used to be called, Cape Horn, because it was so windy. Some of the literary notables who have been associated with San Francisco for varying periods are "Mark Twain," Bret Harte, Henry George, and Robert Louis Stevenson. Stevenson's journey from New York to San Francisco is described in "Across the Plains," and a sojourn in the Napa Mountains furnished material for "The Silverado Squatters."

About a mile southwest of the City Hall, where Dolores and 16th streets join, is an adobe-walled chapel built in 1782. Here Father Junipero established a Mission settlement near a willow-edged stream which was named "Our Lady of the Weeping Willows," and the village became known as the

State House, Sacramento

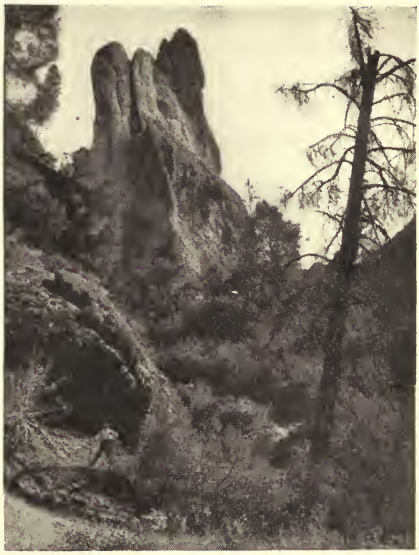
Mission of Sorrows — Dolores. The chapel was unscathed by the earthquake, though a modern church beside it crumbled and fell, and the flames were stayed just before they reached it. Some think it was spared by divine intervention. In its cemetery rest 10,000 dead beneath a jungle of vines. Of the commemorating stones there the one which rouses most popular interest is an ornate monument over the remains of James Casey, gangster and assassin.

San Carlos Mission Church at Monterey

There is still a presidio on the same site as that founded by the Spanish, and in the garrison park is the oldest clay house in San Francisco. Somewhat to the south is Golden Gate Park, a former waste of dunes occupied by squatters, but now transformed into a semitropical paradise. One of the interesting objects in the park is Amundsen's stout ship *Gjoa,* which ploughed the ice of the Northwest Passage. Another is a Dutch windmill of giant proportions, said to be the largest in the world. Near the west end of

Rocks at Monterey

the park is the famous Cliff House, overhanging the ocean, and a short distance out from the shore are the Seal Rocks, where the great sea-lions gambol and emit their strange cries. At one point on the shore is the Giant Tub, in which San Franciscans take their salt-water plunge when the ocean in the open is too chilly. Beneath the glass roof 25,000 persons could find room to bathe or look on, or to stroll in the cheerful corridors. California's favoring climate has fostered the arrangement of many outdoor auditoriums in the forest and near the sea. The most renowned woodland theater is that in which the Bohemian Club gives its annual Jinks in August among the sequoias near Cazadero, thirty miles north of San Francisco.



Vancouver Pinnacles near Sodedad

One of the prettiest towns on the bay is Sausalito, the starting point for the railway which ascend to Mt. Tamalpais, a volcanic cone that rises 2600 feet above the water. The railroad has more curves in proportion to its length than any other ever built. One of its looping intricacies is called the "Double Bow Knot." A part of the woodland on the mountain side is sequoia forest preserved in its primitive state. Santa Rosa, about forty miles farther north, is the home of the botanist-magician, Luther Burbank. Just over

the mountains to the east is Calistoga, in the vicinity of which are various resorts where healing waters flow abundantly from the volcanic soil. A short drive takes you from Calistoga to a wonderful petrified forest of oaks and cone-bearing trees, and twenty-six miles distant are the Sonoma County Geysers. There are more than one hundred of these spouting springs, and the earth about their hissing rifts is hot to the feet.

In the Garden of the Santa Barbara Mission

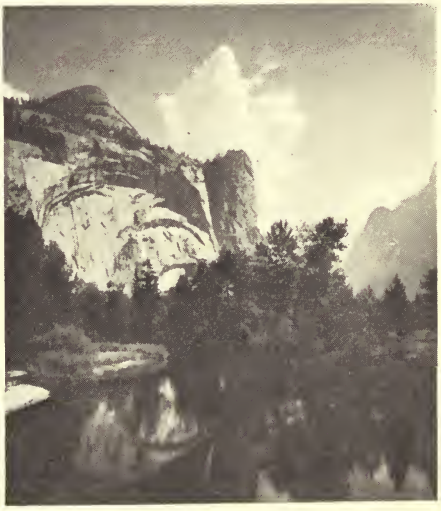
In the far northern part of the state is the mighty Mt. Shasta whose snow-crowned summit rises to a height of 14,400 feet. The ascent is not especially difficult or dangerous. At the top you find a mile-wide crater, 2500 feet deep, and steaming springs among the loose stones. Sometimes cavernous rumblings give warning that the grizzly volcano is not dead. Glaciers grind their slow way down several valleys.

Fifty miles south of Shasta, at the meeting point of the Cascade Mountains and the Sierra, is Lassen Peak, 10,437 feet high, which become an active volcano in 1914, after slumbering for centuries. May 19 of the next year an eruption of hot gases burst forth beneath the deeply snow-covered northeast slope. The snow was instantly changed

THE YOSEMITE VALLEY

into water and steam, and a flood rushed down the channel of Lost Creek. For several miles trees were uprooted or broken off, and meadows were piled with bowlders and other débris. At the same time a hurricane of hot gases killed a stretch of forest that was from a quarter of a mile to a mile wide and ten miles long. The ruins which the eruption left behind may now be viewed with ease and safety. Red Bluff is the most convenient railroad station whence to make a visit.

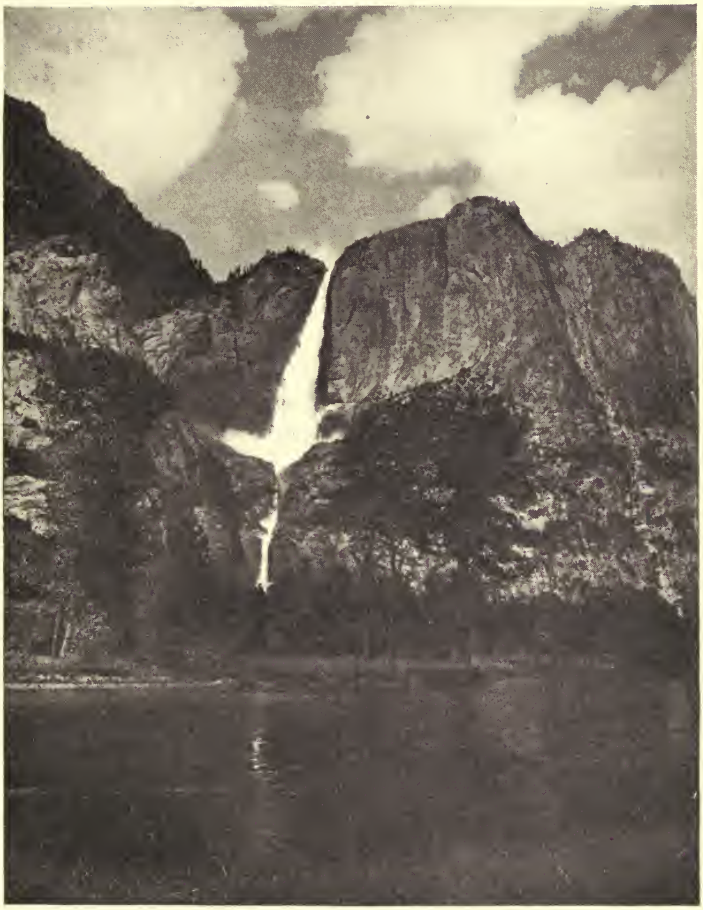
Just across the bay from San Francisco, at Oakland, is Shell Park Mound. The mound which gives the park its name is two hundred and fifty feet long and twenty-seven feet high, and is com-



ROYAL ARCHES, YOSEMITE

posed of loose soil mixed with an immense number of shells of clams, oysters, and other shellfish gathered for food by the prehistoric inhabitants of the region. Over four hundred such mounds have been discovered within thirty miles of San Francisco.

An attractive way to journey from San Francisco to the capital is by stern wheel steamer up the Sacramento River, a distance of one hundred and twenty-five miles. John Sutter, a Swiss, was Sacramento's first settler. There he built a fort in 1839 and called the domain which was granted to him by the Mexican Government New Helvetia in honor of his native land. During the war between the United States and Mexico he and his companions proclaimed the "American Republic of California," and created the "flag of the grizzly, the star, and the bar" to meet the emergency. By a treaty of peace signed in February, 1848, the United States acquired New Mexico and California for $15,000,000. Only a month previous, an employee of Sutter's, while blasting a mill race for a sawmill Sutter was building on the American River, brought to light some yellow particles which proved to be gold. Before the year's end gold dust to the value of $6,000,000 had been taken from the placers of California. The next year about 100,000 Forty-niners arrived from the East. Sutter's land was preëmpted by the rush of gold diggers. His own reward was a pension of $3000. Sutter's fort consisted of an adobe wall eighteen feet high and three feet thick inclosing a space five hundred feet long by one hundred and fifty wide. It had twenty-four cannon and a garrison of one hundred well-drilled Indians in uniform. The fort became ruinous as time went on, but it has now been restored. When the California State House was completed in 1867 it was declared to be the most beautiful public building in the United States. The city takes pride in an ostrich farm which yields a considerable income.



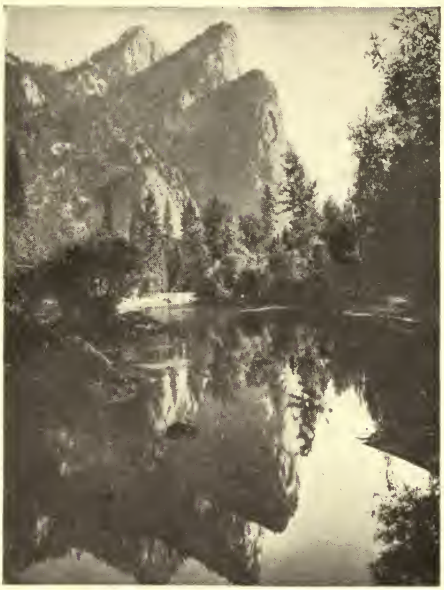
The Yosemite Falls — the Highest in the World

Thirty miles southeast of San Francisco is Palo Alto. The name means Tall Tree, and the great redwood which suggested the name still stands. Stanford University is the great attraction at Palo Alto. It has an endowment of $30,000,000, and its buildings, in the Mission style of architecture, with long corridors and inner courts, are the finest possessed by any university in the world.

San José, the "City Beautiful," twenty miles farther south, was established by the Spaniards in 1797, and is therefore old as California reckons time. It is in the center of the largest compact orchard on the globe. This is sheltered by the mountains round about from every asperity of land or sea. Twenty-six miles away is the Lick Observatory on Mt. Hamilton. The distance to the summit from the base of the mountain is only two miles in a direct line, but by the road it is seven miles. The road is said to make three hundred and sixty-five bends between base and summit. The observatory is one of the most notable in the world in point of situation, equipment, and achievement. Its great telescope has a thirty-six-inch object glass. James Lick, whose gift of $700,000 built the observatory, is buried in the foundation pier of the telescope.

One of California's most attractive beach resorts is Santa Cruz. The town is ideal in climate and in its outlook from its hillside retreat. Within a few miles is a grove of one hundred great redwoods which rival the *Sequoia gigantea* in height and grace. Fremont and his soldiers camped in this pillared forest in the winter of 1847. A hollow stump which served as his shelter is named for him. This same stump is said to have been the family dwelling of a trapper, and the birthplace of several of his children.

Monterey is another charming shore resort. It was there that Father Junipero Serra, the saint of the Spanish régime on the coast, founded the second of California's Missions.



THE THREE BROTHERS — YOSEMITE

On a June day in 1770 he and his company landed below the present presidio after a voyage from San Diego, and raised with accustomed ceremony a thatched altar, and swung from the limbs of an oak, which still lives, the clarion bells that should call to the worship of the true God the Indians of the vicinity. San Carlos Mission was afterward removed from the site near the garrison to a valley, six miles away, where the Carmel River meets the ocean. For fourteen years Father Junipero lived there, only going at intervals to the other Missions he established. They were all approximately thirty miles apart — a day's journey. In 1784 the good priest died at San Carlos, and there he lies buried. The church as it is now is one of the most attractive and extensive ruins on the coast. Its exterior is almost perfect, and much of the decorative masonry has not yet crumbled.

About thirty miles easterly from Monterey, near Soledad on the Southern Pacific Railroad, are numerous caves, and there are many spire-like rock formations that are from six hundred to one thousand feet high. These "Pinnacles" are visible for a long distance. Seventy-five miles farther south

on the railroad is Paso Robles (Pass of the Oaks). Here are medicinal springs which healed the Indians long before the white men came. Now you find a great establishment that is both a sanatorium and a tourist hotel, where every kind of water cure may be taken. The temperature of the sulphur spring that supplies the bathhouse is one hundred and seven degrees.

A little farther south, at San Luis Obispo, is another of the old Missions. In the garden-court of the Mission, guarded by a white-pillared portico and the cupola-spire of the church, are gnarled grapevines and an enormous palm. San Luis is connected by railroad with Port Harford, near which is Pizmo Beach, an extraordinary floor of hard-packed sand, twenty miles in length. In summer this beach is thronged with people who dwell for the most part in neighboring tents and cottages. Over the firm shining strand many fast motor races are run.

Charming Santa Barbara, once the dwelling place of Spanish aristocracy, has retained a character of its own which distinguishes it from all other California tourists' haunts. In its byways are houses which stood there when a fine horse to ride, plenty of

The Overhang, Half Dome

beef and frijoles to eat, and cigarros to smoke, tokened the local Spaniards' gauge of bliss. Whole days were spent on horseback, visiting taverns, and galloping from host to host. There was an Indian village here when the Spaniards came in 1782 and established a garrison. Four years later the Indians were put to work as masons and carpenters to build a Mission. The present thick-walled, Moorish-towered monastery, which was erected not long afterward, still resounds with the intoning of the monks, and is the best conserved and most visited of all the Mission edifices. Many are the delectable rides, walks, and sails to be had about Santa Barbara. The twelve-mile Mountain Drive which circles the hills of Montecito is the traditional Saturday afternoon promenade of all the town. Directly off the coast about a score of miles is a series of islands. One of these islands is Ahacapa, the attractions of whose rocky broken heap are its steep cliffs, and the wonderful weeds and moonstone pebbles about their base. The great arched caves of the island coast of Santa Cruz and

Vernal Falls

such indentations of its shores as Potato Harbor, Pelican Bay, and Smugglers Cove are favorite resorts for excursionists and anglers. Most Santa Barbara visitors would be interested to read the account of early days there in Dana's "Two Years Before the Mast." The book entertainingly describes the aspect and customs of every old sea town from San Francisco to San Diego.

Arched Rock between El Portal and the Yosemite

The San Joaquin Valley is one of the great agricultural basins of the world. It is two hundred and fifty miles long by about fifty wide. In it grows half the wheat raised in California, and wheat farms of 10,000 to 50,000 acres are not uncommon. Here too you may see thousands of acres of alfalfa, vast vineyards, and astonishingly large orchards of prunes, peaches, apricots, figs, and other fruits. It produces fabulous crops of asparagus, potatoes, beans, and melons, and is famous for its cattle, sheep, and hogs. Nearly all the raisins grown in the United States come from here. About the end of August the grapes are cut and laid on trays to dry in the hot sun for something like three weeks. There have been years when the yield was so abundant that the raisins were fed to cattle. To promote their use as a food the 30th of April is observed throughout the state as Raisin Day.

Mirror Lake

On that day every loyal inhabitant is expected to help one of California's great industries by partaking of as many dishes as possible in which dried grapes are used. Irrigation is the chief dependence for producing crops, and water for this purpose is abundant. The metropolis of the southern part of the valley is Bakersfield, the center of California's richest oil fields. Around Stockton, at the other end of the valley, are reclaimed delta lands, broken into island farms that remind one of Holland. Barges ply the canals, which branch from the river and form convenient waterways for the transport of dairy produce and cereals, fruit and vegetables, and they enable the butcher to make his deliveries by boat at the farmer's door.

East of the valley are the wonderful heights and valleys of the Sierra Nevada, inviting you to make excursions into

them. Much of the year winter has such a grip on them that they are not easily accessible, as is evidenced by the fact that the Union Pacific Railroad in climbing the range passes through thirty-seven miles of snowsheds. Among the heights, about one hundred and twenty-five miles east of San Francisco, is the important Calaveras Grove of sequoias. These trees grow in thirty-two groves, all of which are on the western slopes of the Sierra Nevada at a height exceeding 3000 feet. A Calaveras tree which was cut in order to make a dance floor of the stump was twenty-four feet in diameter and only 1300 years old.

Somewhat farther on is the Yosemite National Park. It is a little larger than Rhode Island. The lower parts have an altitude of about 3000 feet, and two of the peaks exceed 13,000 feet in height. The best months for a visit are May and June, when the falls have the most water and there is no dust. Travelers usually go to the Yosemite Valley by way of Merced and El Portal. From the latter place a twelve-mile stage road takes you into the heart of the valley. You can go there at any time in the year, but the cold and the

Tuolumne Meadows and Cathedral Peak

heavy snowfall on the mountains are deterrents in winter. The valley is seven miles long, has an average width of one mile, and is about three quarters of a mile deep. Its floor is well grassed, and is adorned with trees and groves. Through it winds the Merced River by which the valley was cut from the solid granite nearly to its present depth. The meandering Merced was then a roaring torrent that gouged constantly deeper, helped by the friction of quantities of sand and rock fragments it carried down from the High Sierra. It scoured the canyon day and night for millions of years. The valley was V-shaped when the glaciers arrived, and the present waterfalls were cascades. The ice that filled the canyon for unknown thousands of years widened and deepened it, made it U-shaped and transformed the cascades into waterfalls. A lake occupied the valley, after the ice vanished, but finally filled with sediment. About twenty-five small glaciers still remain in the park, and there are ten times that number of glacier-formed lakes.

Wawona Tree

An Indian legend tells of a young brave, one of the dwellers in the valley, who, while going to Mirror Lake

to spear fish, encountered a huge grizzly bear. He fought the beast with his spear and a club, and finally killed it. This exploit won for the young brave the name Yosemite, which means "Full-grown Grizzly Bear." The name was transmitted to his children, and eventually given to the entire tribe inhabiting the valley. Mirror Lake was called the "Sleeping Water" by the Indians.

Gen. Grant Tree

The valley was first seen by white men in 1851, when a military expedition went there to negotiate with the tribe. Not till four years later did it have any more white visitors, and then the flow of Yosemite sightseers began, though the annual average in the next half dozen years was only about a hundred. Not until 1874 were the first wagon roads completed to the valley. A few Indians are even yet permanent dwellers in the valley, and others come there to live during the summer. They gather wood, pine nuts, and acorns, catch fish, do household work for the whites, and sit in their cabins or under the trees weaving baskets to sell to tourists.

The ponderous, almost perpendicular cliff, El Capitan, at the entrance to the valley, rises 3600 feet above the wild

Bubbs Creek Falls, Sequoia Park

flowers; Cathedral Rocks, 2600 feet; Half Dome, 5000 feet; and Clouds Rest, 6000 feet. Perhaps the most beautiful waterfall at all times and seasons is the 900-foot Bridal Veil. It is not inaptly named, for the breeze catches it and sways it outward and wafts it in gauzy festoons from side to side, giving it a marked likeness to a slender veil of white cloth of delicate texture. The Indian name for this fall meant the "Spirit of the Evil Wind." The Indians thought its influence baleful, they heard the murmur of ghostly voices in the sounds of its falling, they felt the breath of a destroying angel in the cool air that drifted away from it. There was ill omen merely in passing it. Across the valley is a very tiny waterfall known as the Maiden's Tear. It is so called because it is so far from the Bridal Veil. The upper Yosemite Fall measures 1430 feet, the Lower Fall, 320 feet, and the total drop from crest to river, including intermediate cascades, is half a mile. The slender Ribbon Fall makes a vertical drop of 2300 feet, Nevada Fall 600, and Vernal Fall 300 feet.

In the park are three groves of the giant sequoias. The Mariposa Grove, which is by far the most important of the three, contains about five hundred and fifty of these trees. Among them is the Grizzly Giant, which has a diameter of

thirty feet and a height of two hundred and four feet. The grove is a thirty-two-mile stage ride from the valley. Some of the other species of trees in the grove grow to enormous size. Many of the sugar and yellow pines are from four to ten feet in diameter and nearly or quite two hundred feet high. The former's cones are the largest produced by any conifer. Occasionally they reach a length of almost two feet.

About a hundred miles south is the Gen. Grant National Park of Big Trees, and fifty miles farther on is the large Sequoia National Park. In the latter is the General Sherman Tree, reputed to be the oldest living thing on the face of the earth. It is one hundred and three feet in circumference and two hundred and eighty feet high. In volume of wood it seems to be the largest known tree. The sequoia is Nature's forest masterpiece. More than a million of these trees

The Fallen Monarch

grow within the confines of the Sequoia Park, many of them mere babes that are only a few score years old. At least 12,000 are over ten feet in diameter. They do not attain full vigor until they have reached the age of about 1500 years, and a few are still sturdy which are three, four, and possibly five thousand years old. In a fruitful year a single tree may produce 1,000,000 seeds. The seeds are exceedingly small, and develop in cones only about two and one half inches long. Middle-aged trees are commonly free of branches from fifty to one hundred feet above the ground. The tip of the older trees has usually been smashed by lightning, and is a dead snag surrounded by living upward-turned branches. The wood resists decay marvelously, and a fallen tree will remain sound for hundreds of years.

The General Grant Park is on the route from Sanger to Kings River Canyon. The South Fork of the river flows through a canyon that rivals the beauty of the Yosemite. The scenery near the headwaters around Bullfrog Lake is particularly wild, and in that vicinity Mt. Whitney, the supreme apex of all the mountains in the United States, rises to a height of 14,501 feet. Several of the neighboring peaks are only a thousand or so feet less high. The ascent is commonly made from the east after leaving the railroad at Lone Pine. Both the highest and lowest points in

Road near Kings River Canyon

Bullfrog Lake and West Vidette Mountain

the United States are in California only a short distance apart. A few miles east of the mountain the lowest place is a spot in Death Valley, two hundred and seventy-six feet below the level of the sea. This valley, one hundred and fifty miles long with an average breadth of fifteen miles, acquired its name from the loss of numerous emigrants who attempted to pass through it in 1849. It was formerly the bed of a salt lake. Several watercourses enter it but only contain water after heavy rains, which are rare. The air is so dry in this "Valley of Burning Silence" that dew never forms. Sand storms and dust whirlwinds are common. In summer the thermometer sometimes records on successive days one hundred and twenty-five degrees in the shade. The valley was the scene of a "borax stampede" in 1852, and prospectors went crazy from the heat and died on the lonely sands, and there their bleaching bones were found later. Borax exists in Death Valley in inexhaustible quantities, and is now carried away by railroad from Ludlow. Formerly it was conveyed by the well-advertised twenty-mule team, which drew a wagon with a capacity of ten tons across the blistering plains. In this vicinity is San Bernardino County, the largest in the United States. It has an area two and one half times that of the state of Massachusetts.

Summit of Mt. Whitney

Los Angeles came into being as a Mexican settlement in 1781, and for scores of years was a slovenly quarrelsome village with scarcely a saving grace. Education began in 1790, with a village school whose master received one hundred and forty dollars a year. An American force entered the city August 13, 1846, and raised the Stars and Stripes. The frightened inhabitants had fled to the neighboring ranches, but returned to their homes before night, attracted by the irresistible strains of a brass band. A garrison of fifty men was left in charge, but the commander made himself unpopular by interfering with the amusements of the people, and a revolt was organized. Then a Mexican general with three hundred men appeared, and the garrison surrendered after holding the place less than two months. A reconquest took place in January. One of the first things the Americans did was to shorten the Spanish name, Pueblo de la Reina de los Angeles (Town of the Queen of the Angels). By 1859 a stage line was in operation to San Diego, and overland stages left for the East three times a week. There is even yet a straggling Mexican quarter of the modern city, and on the outskirts you may find the adobe house, and the mud hovel thatched with straw. Los Angeles claims to have more automobiles and telephones in proportion to its inhabitants than any other American city. Its population increased in thirty years from 11,000 in 1885 to over half a million. The residential section is noted for its many

beautiful mansions embowered in semitropical bloom and verdure. The most abundant trees in the streets and parks are the eucalyptus from Australia, the graceful pepper tree from Peru, and palms, native and foreign. The water supply is brought by means of the longest aqueduct in the world across the desert and through mountain tunnels a distance of two hundred and twenty-six miles. In the northern part of the city is a belt of oil-producing territory covering an area of two square miles. Here are hundreds of derricks erected in close proximity to dwellings. Eight miles west of the city are asphalt springs which contain wonderful bone deposits. Such springs are the most effective animal trap known, and the asphalt preserves the bones of the creatures that are caught in its deceptive and sticky pools. Skeletons of elephants, camels, sloths, condors, saber-toothed tigers, and many other animals are being gradually dug out and set up in a museum. Among the bones has been found the skull of a human being who probably lived not less than 10,000 years ago.

Devil's Post Pile, Sierra Forest

Wonderful crops are raised in the region tributary to the city. You are asked

to believe that corn sometimes grows to a height of twenty feet, that pumpkins may weigh as much as four hundred pounds, and that holes from which beets have been pulled are of a size sufficient for fence posts. Near Whittier, a few miles south, is a pear tree which has grown fruit to the value of $1500 in a single year. More than a third of the state's annual crop of 1,000,000 tons of sugar beets is raised in Los Angeles and Orange counties.

A short distance east of Los Angeles, toward the city's mountain background, is the Mission Church of San Gabriel, erected after the earthquake of 1812 had shattered the previous structure. The church has never been disused. Seven thousand Indians are buried in its cemetery. A little to the north of the old Mission is Pasadena. Key of the Valley and Threshold of the Mountains, the Indians called its site. As recently as 1880 the plateau here was a sheep-run, and the huts of the herders were the only habitations. Now it is a city of country homes wonderful in their architecture, flawless lawns, abounding flowers, and arboreal streets. The most important of the near heights is Mt. Lowe, with an altitude of over 6000 feet. You can go half way up by trolley to the Alpine Tavern, and on pony-back the rest of the way to the summit.

An Oceanside Oil Field

Fifty miles to the east is San Bernardino, which was

settled in 1851 by 500 Mormons. They paid the Mexican owners of the land $7500 for 37,000 acres. The place has an agreeable winter climate, but blinding and stifling dust-storms frequently whirl through Cajon Pass from the Mojave Desert. At the base of the mountains, seven miles distant, is a health resort with its boiling springs, one of which has a temperature of nearly two hundred degrees and a daily flow from the rock of half a million gallons. Numerous important towns have grown up in the region adjacent to San Bernardino. One of them is Redlands, which has close about it a crescent of snow-mantled peaks, some of which are more than two miles high, overlooking an Eden of matchless fertility. Bear Valley, Pine Lake, and numerous canyon retreats entice campers, huntsmen, and anglers.

Mission Bells, San Gabriel

A Glass-bottomed Boat, Santa Catalina Island

Somewhat to the southwest is Riverside, which has been called a "populated orange grove." Unwavering lines of well-groomed, round-topped trees spread

ARCHES OF THE OLD CAPISTRANO MISSION

for miles over a tract that was barren desert until it was irrigated. At Riverside the seedless navel orange was introduced in the United States. Four young seedless trees that had been brought from Brazil were set out here in 1873, and six years later the two trees that survived began to bear. These two ancestral trees, whose progeny produce by far the larger part of the state's orange crop, are the most venerated monuments of the region. Riverside has a park which contains three hundred varieties of cacti. Magnolia Avenue, one hundred and fifty feet wide, and many miles long, is bordered by magnolias, eucalypti, and very tall fan palms with hairy trunks. Before sunrise on Easter morning a procession leaves the town to ascend the near-by brusque pyramidal Mt. Rubidoux, on the summit of which is a cross consecrated in 1907. Since then clergy of varying creeds have addressed the early morning multitude which is attracted thither each Easter. The listeners gather among the bowlders, and there, on the isolated height, the preacher's voice is lifted in the stillness of approaching day, as distant snowy crests take on the first glow of color.

Fifteen miles west of Los Angeles is the ocean, whose coast is lined with shore resorts for a long distance, and twenty-five miles out in the sea is Catalina, the "Isle of Summer." In the middle of the island tower the peaks of Black Jack and Orizaba, and their canyons and ridges slope down into the sea. Avalon, nestling in the crescent of the widest canyon's mouth, is a pleasure resort of wooden houses, shops, and hotels. Visitors find enjoyment in the splendid fishing, in observing the mysteries of the sea from the famous glass-bottom boats, in walking and driving among the mountains, in hunting the wild goats on the cliffs, and in making excursions by launch to Banning Beach, where sea lions sport among the rocks. A tuna taken off Avalon weighed two hundred and fifty-one pounds, the record for a swordfish is three hundred and thirty-nine pounds and for a black sea bass four hundred and thirty pounds. Eager boys paddle about in the warm water ever ready to follow down to the floor of the bay coins tossed into their vicinity, and they will bring up in return any shell or bit of bright-colored seaweed you point out.

Joshua Tree

About half way between Los Angeles and San Diego is the indolent little village of Capistrano. Those who dwell there — Indians, Spaniards, and a few Americans — tend sheep, participate in cock-fights, and spend uncounted hours moving around the buildings to keep in the sun. On the borders of the town

is the most beautiful ruin in the Mission chain. The church was dedicated in 1806. A half dozen years later, in the midst of a service, an earthquake toppled a tower, which crashed through the chapel roof and killed forty-three of the congregation.

Thirty miles farther south, and four miles from the railway station of Oceanside, is the Mission of San Luis Rey. This "Queen of all the Missions" once ruled a realm of a quarter of a million acres, and 40,000 head of cattle browsed on its pastures. The church, erected in 1802, has been partially rebuilt in recent years, and guests are again received graciously at the monastery door. It is a notable example of Moorish architecture.

In 1876 the San Diego Mission, which was on a hill six miles from the present city, suffered from an appalling massacre by the Indians. The present Mission ruins are those of buildings erected after 1803. The first Mission was at what is now called Old Town. This place was the home of Ramona, the heroine of a much-read novel, and a quarter of a mile distant is the chapel where she was married. Beyond Old Town is the wave-hewn shore of La Jolla, where the tide sweeps into vaulted caverns scooped in the deep-tinted cliffs, and red seaweeds trail through phosphorescent waters that teem with scurrying creatures. The most outjutting piece of land on the coast is Point Loma on which is the Tent City of the International Theosophical Society with its turreted and domed Headquarters Building, Music Pavilion, and Greek Temple. Across the outlet of the bay from Point Loma is the long narrow strand of Coronado Beach, where all sorts of seaside pleasures are to be had. Six miles from San Diego, around Chula Vista, are many square miles of irrigated lemon groves.

About fifty miles northeast, the Mesa Grande Indians have a village. They are remarkably skilled in basketry

Vancouver
New Westminster
Nelson
Rossland
Strait of Juan de Fuca
Victoria
Bellingham
Mt. Baker
Cape Flattery
Port Townsend
Puget Sound
Everett
Chelan
Columbia R.
Pend d'Oreille L.
Spokane R.
Fk.
Coeur d'Alene
OLYMPIC MTS.
Seattle
Aberdeen
Hoquiam
WASHINGTON
Spokane
Wallace
Grays Harbor
Willapa Harbor
Tacoma
OLYMPIA
Ellensburg
Colfax
Cape Disappointment
Mt. St. Helens
Chehalis
Mt. Rainier
Yakima
Snake R.
Moscow
Mt. Adams
Walla Walla
Lewiston
Astoria
Vancouver
Columbia R.
Pendleton
Grangeville
Portland
The Dalles
Mt. Hood
Salmon R.
SALEM
La Grande
Willamette R.
Albany
Mt. Jefferson
Baker City
Weiser
Eugene
Marshfield
OREGON
Ontario
Diamond Peak
BOISE
Roseburg
Crater L.
Harney L.
C. Blanco
Grants Pass
Medford
Mt. Pitt
Upper Klamath L.
Warner Lakes
Silver City
Ashland
Shoshone Falls
Twin Falls
Klamath R.
Mt. Shasta
Goose Lake
Cape Mendocino
Eureka
Winnemucca
Elko
Wells
Mt. Lassen
Humboldt R.
Pyramid L.
Lovelocks
Great Basin
Chico
Reno
Austin
Eureka
Marysville
Virginia City
Lake Tahoe
CARSON CITY
Ely
Santa Rosa
Sacramento
Walker L.
Wheeler Peak
NEVADA
SAN FRANCISCO
Oakland
Stockton
Manhattan
Tonopah
San Francisco Bay
Alameda
Mono Lake
Goldfield
Piochec
YOSEMITE NATIONAL PARK
San Jose
Caliente
Santa Cruz
Monterey Bay
Rhyolite
Death Valley
Monterey
Fresno
Mt. Whitney
Bullfrog
Owens Lake
Las Vegas
Tulare Lake
San Luis Obispo
Bakersfield
Mohave
Mohave Desert
Pt. Conception
Santa Barbara
Pasadena
San Bernardino
SAN BERNARDINO MTS.
LOS ANGELES
SANTA BARBARA ISLANDS
Redlands
Riverside
Ontario
Colorado R.
San Diego
Yuma
Scale of Miles
0 50 100 150 200 250 300

and wood carving. On the evening of All Souls' Day, November 1, the ceremony of candle lighting takes place in the Indian graveyard near the chapel. Tapers are placed on the mounds of the dead, and the company wails and chants around a great cross to the tolling of bells.

Not far beyond the eastern boundary of San Diego County is the famous Imperial Valley. In 1901 no whites and very few Indians lived in the desert waste west of the Colorado River. But three years later 70,000 acres of irrigated lands were under cultivation, and had drawn 10,000 people to the vicinity.

Beautiful Lake Tahoe

XLVIII

Nevada

Nevada is a Spanish name which signifies snow-clad, and refers to the snow-covered mountains along the western border of the state. As a whole, Nevada is an elevated plateau, and it is the most arid state in the Union. About four per cent of it is in farms, and yet little more than one per cent is improved land. Nevada was once nearly all a desolate wilderness, but railroads, the development of mineral resources, irrigation, and dry farming have given it a new character. There are still large areas destitute of water and vegetation that never can be reclaimed. However, much of the arid region is utilized for grazing purposes, and some of the ranches devoted to grazing are from fifty to one hundred thousand acres in extent. Nine tenths of the farms are irrigated. The most important event in the history of the state was the building of a great irrigation

dam on the Truckee River which will furnish water for 200,000 acres of desert. The population of the state in 1860 was less than 7000. Now it is about 100,000, which means there is less than one person on each one and a half square miles. The rapid radiation, due to the dry air, cloudless skies, and high altitudes, makes the nights cool even after the hottest summer days. In the winter the temperature may fall below zero at night, yet it rarely fails to rise above freezing during the day.

The history of Nevada is chiefly the history of the mines. Periods of activity and prosperity have alternated with periods of depression. Each discovery of high-grade ore in noteworthy quantity has been followed by rapid settlement in that locality, and the establishment of one or more towns. Exhaustion of the richest and most accessible ores or the bursting of overinflated speculative bubbles has resulted in at least local stagnation and depopulation. Nevada's mining districts number about two hundred and are widely distributed over its area. Almost every one of the larger mountain ranges contains some ore.

Trappers began to ply their trade in Nevada about 1825, but no settlement was made until 1849. Then the Mormons founded a trading post in the valley of the Carson River near the present town of Genoa to sell supplies to gold seekers on their way to California. In 1861 Nevada became a territory, and the next year the legislature took action looking to

An Elko County Valley

the establishment of the state of Washoe. It was admitted to the Union in 1864. Along the dividing line between Nevada and California, and extending down into Arizona, is one of the richest mineral belts in the world, and on this Nevada is peculiarly dependent. At one time Nevada produced more gold than any other state, and more silver than all the other states put together. Even now it ranks first in the production of silver.

A Prospector, Mt. Davidson

In 1850 a couple of land viewers killed a bear in the Carson Valley. They were preparing to skin it when one of them stuck his knife into a crevice in a rock and uncovered a small nugget of gold. They called the gulch "Gold Canyon." During the next half dozen years thousands of miners were drawn thither from the California fields. A little stream in the canyon had its source far up on the slopes of Mt. Davidson. Prospectors worked up the stream and into the cross gulches, finding much treasure. Often they dug into a peculiar hard blue clay on which they bestowed many lurid adjectives. For half a dozen years the prospectors formed their camps about the mountain searching the region for gold, and making enough finds to keep up the excitement. One day a farmer from a distant ranch came into Virginia City with a load of supplies. He knew nothing of ores or minerals, but he picked up a lump of the curious blue clay and sent it to a friend in San Francisco who was an assayer. The assay showed that the clay contained $1595 in gold and

Mill at Goldfield

$4791 in silver to the ton. San Francisco men of capital hurried to Virginia City and bought up all the cheap abandoned claims they could secure. Tunnels were driven and shafts sunk, and the great Comstock Lode was at last revealed — the lode that made multi-millionaires of the "Big Four" Californians, Fair, Mackay, Flood, and O'Brien, and the fortunes of a score of others. The lode is about four miles in length, and increases in width from nothing at the ends to 3000 feet in the middle. The ore contains gold and silver in the proportion of two of the former to three of the latter. These metals occur in great pockets known as bonanzas. Virginia City, though in the midst of a desert, grew to be a thriving place with a population of 30,000. To-day there are less than one tenth that many, and dilapidation and ruin are seen on every hand. Mark Twain began his literary career in the old mining camp as a reporter on a local paper, and there he got much material for his book "Roughing It."

In 1900 rich deposits of gold and silver were discovered a hundred miles southeast of Virginia City, and the village of Tonopah leaped into existence. The place was in the very heart of a desert, where springs were thirty or forty miles apart, and nothing grew except sagebrush, cactus, and mesquite. But in two years it had four thousand inhabitants and a water system, was lighted by electricity, and a railroad had crawled to it over the desert. About that time a second big strike was made thirty miles to

the south, and Goldfield was put on the map. Prospectors kept roaming about the region, and sixty miles beyond Goldfield discovered the Bullfrog district, which was soon linked with the railroad by a line of automobiles, daily stages, and toiling trains of freighters' wagons.

Carson is the capital of Nevada, and is a real curiosity, it is such a half-wild and tiny hamlet for a state capital. The place has about 2500 people. The famous divorce town of Reno is the largest place in the state.

On the boundary line between Nevada and California is Lake Tahoe, some twenty miles long and twelve broad, surrounded by forests and snow-capped mountains. It is more than a mile above sea level, and is marvelously deep and crystal clear. There are many lesser lakes in the vicinity, and foaming cascades and good hunting and fishing. The region is at its best in the late summer and autumn. One can judge of the virtues of the lake from the fact that Mark Twain, who spent some time on its shores, says, "Three months of camp life on Lake Tahoe would restore an Egyptain mummy to his pristine vigor, and give him an appetite like an alligator." Capt. Dick, an eccentric old English mariner, chose this wild mountain retreat for his home, built a cabin, and chiseled out a tomb in the

A Street in Carson, the Capital

solid rock on a lonely craggy island. But he fell out of his boat while intoxicated, and the lake, which is said never to yield up its dead, became his last resting place. The lake can be visited from Carson around the south and east sides, or from the north by way of the quaint California mountain town of Truckee.

Nevada's loftiest height is East Peak in the White Mountains, with an altitude of 13,145 feet, west of Tonopah on the boundary line. The popular name for Nevada is the "Sagebrush State," and the nickname for its people is "Sage Hens."

THE MOUTH OF THE COLUMBIA

XLIX

Oregon

In 1805 the Columbia bore the canoes of Lewis and Clark, the first transcontinental explorers, from the slopes of the Rocky Mountains to the sea. The next year, after spending the winter south of the river's mouth, they went back up it, and down the Missouri to St. Louis. Their report aroused great interest, but there was much opposition to holding the "western wilderness" in the Union. A United States senator from New Jersey declared in 1825 that never should the territory of Oregon become a state, and went on to say that a member of Congress would be obliged to journey 9300 miles in coming to the seat of government and returning. If he traveled at the rate of thirty miles a day, the time required, after allowing Sundays for rest, would be three hundred and fifty days. This would allow only a fortnight at Washington. In the same year Senator Benton of Missouri said: "The ridge of the Rocky Mountains may be named as a convenient, natural, and everlasting boundary. Along this ridge the western limits of the republic should be drawn." Up to 1845 the United States Government never, by an official act, aided or attempted to control Oregon. Our statesmen regarded our domain as already vaster than

was necessary. "What do we want with Oregon?" Senator Winthrop of Massachusetts asked in one of his speeches. "We will not need elbow room for a thousand years."

A South Carolina senator declared, "The whole of Oregon is not worth a pinch of snuff." Daniel Webster was of the same opinion. "Oregon is a vast worthless region of savages, wild beasts, deserts of shifting sands, and prairie dogs," he said. "What use have we for such a country?"

In 1811 John Jacob Astor's Pacific Fur Company founded a trading post a few miles from the sea up the Columbia, and called this earliest of American settlements on the coast Astoria. A fort, a stone mansion, and other buildings were erected. The *Tonquin*, which brought the settlers, sailed up the coast to Vancouver Island, where it was attacked one day by Indians. The savages were only driven off after all but five of the whites had been killed. When night came, four of the survivors went away in a boat, for they expected the attack to be renewed, and a shoreward breeze prevented their escaping with the ship. The fifth man was seriously wounded, and he remained. In the morning, after enticing a crowd of savages on board, he set fire to the magazine and had his revenge by blowing up the ship and destroying many of the Indians, though he perished also. The four fugitives were captured and put to death

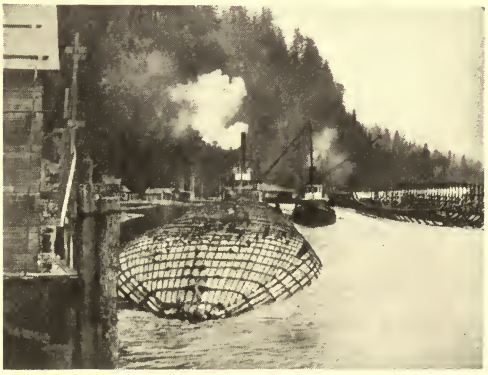


Photo by Gifford and Prentiss

SEA-GOING RAFT, 6,000,000 FEET OF LUMBER

A Salmon Wheel

with barbaric tortures, but a native interpreter who had been on board the ship got away to Astoria with news of the disaster. Prospects were very gloomy. The local Indians were suspected of plotting against the post, and the man in charge assembled several of the chieftains, held up a small bottle before their eyes, and announced that in it was the smallpox safely corked up. He threatened to withdraw the cork and let loose the pestilence if they were unfriendly. Thus he aroused their fear, and they called him the "Great Smallpox Chief."

Astoria no longer is interested in peltry. Its fortunes now are founded on fish. There are 2000 vessels in its fleet. The salmon fisheries are the most valuable in the world except those of the oyster and herring. By far the largest salmon fisheries are on the Pacific coast of North America. No other river has contributed as many salmon as the Columbia, and Astoria is the chief center of the industry. They are caught in nets of various kinds, and also in the salmon wheels which may be seen at many points along the riverside. By means of these wheels, which are kept in motion by the current, the fish are automatically scooped up and thrown into a tank. The cans alone used for packing the annual catch in the river cost over a third of a million dollars.

Captain Gray, a New England skipper, discovered the river in 1792. He sailed up to where Astoria now is, raised the American flag, and took possession of the region in the name of the United States. His staunch vessel, the *Columbia*, furnished the river its name. Ocean going ships of the deepest draft can navigate the river for more than a hundred miles, and it is the main artery of water traffic for a region which is imperial in its size and its resources. Thirty miles above its mouth it is six miles wide, and near where it joins the sea it broadens to seventeen miles. No wonder then that the early navigators mistook it for a great bay of the ocean!

For a long time Great Britain claimed that the Columbia should be the dividing line between western Canada and the United States, but in 1846 it was definitely agreed that the disputed boundary should follow the forty-ninth parallel.

Salmon in Net

An important tributary of the lower Columbia is the Willamette, which flows northerly and joins the greater river one hundred and twenty miles from the Pacific. In the Willamette Valley flowers and strawberries are picked nearly every month of the twelve, and sweet peas live through the winter and blossom anew in May. Tales are told of a hun-

dred cherries, some of them an inch in diameter, growing on a single twig, of nine-pound carrots, and parsnips five feet long. The valley boasts of a greater variety and number of game birds than any other region in the United States.

One autumn evening in 1843 two men landed from a canoe and pitched their tent for the night under the pine trees on the west bank of the Willamette, ten miles from where it makes a junction with the Columbia. On the site of their encampment they projected a town, and within a few months a clearing was made and a log cabin built. About a year later the first store began to do business, and the little settlement, which hitherto had been known as "the village," or "Stumptown," was now dignified with the name of Portland. This matter of a name was settled by the two partners in the store enterprise. They were New Englanders. One was from Boston, the other from Portland, Maine, and each wanted the town to bear the name of his home place in the East. They agreed to let the verdict of a tossed coin decide the name of the future metropolis — "Heads for Boston, and tails for Portland" — and tails won. The discovery of gold in California caused such a stampede from Oregon that Portland at one time contained only three adult men. As late as 1860 it had no more than 2000 people. Now it is the largest city in Oregon, and one of the greatest in the entire West. Fleets sail from its harbor to all the world, carrying lumber, wheat, wool, and fish. It claims to be a city

Trolling for Salmon, Willamette Falls

A Village in the Columbia Valley

without a shabby quarter, wholly fair, sane, and charming. On the slopes above the business section are streets of beautiful homes and schools, and crowning all is the Crest, where the braves of old held their councils. At Third and Taylor Streets a tall steepled edifice stands on the spot where the Methodists erected in 1847 Portland's plain little first church among the blackened stumps and logs of a partially cleared wilderness. One of the city's attractions that has an unusual individuality is a Forestry Building, fifteen minutes' ride from the business center. This "log palace" is constructed of timbers from five to six feet in diameter. Some of them weigh thirty-two tons and contain enough lumber "to build a small cottage, fence it in, and lay a walk to its door." The interior of this sylvan palace is a shadowy Hall of Giants, where the trees in their rough coats serve as pillars to support the lofty roof. The trees were cut seventy-five miles from Portland on the Columbia, down which they were floated. The city is famous for its roses, particularly in early summer and in October. In texture, tint, fragrance, and size the varieties grown in this section are superior to those of England, France, or California. A hundred miles of rose bushes border the city's sidewalks. An eight-year-

old climber has borne 5000 golden blossoms at one time. Seven hundred kinds of roses are displayed at Peninsula Park in a picturesque sunken garden. For a half week each June Portland has a Rose Festival. From Kings Heights are to be had wide views easterly that in clear weather include the snowy peaks of mountains on the horizon. From the Portland hills can be seen five of these white-crowned peaks, the best beloved of which to Oregonians is Mt. Hood, the loftiest height in the state. It has an altitude of 11,225 feet.

On Swan Island, a short distance from Portland up the Willamette, a Frenchman cleared the first Oregon farm in 1829. Ten miles farther up the river is Oregon City, with its "Great Falls," formed by the water leaping in numerous cascades down a total descent of forty feet. Many big mills congregate about the falls now. Just below the falls is a favorite resort for fishermen to test their skill with the line when the chinook salmon are running upstream in the late spring. Sometimes more than a hundred rowboats of the anglers can be seen there, capturing the gleaming salmon that weigh from twenty to sixty-five pounds. Another important place beside the Willamette is Salem, the capital of the state, settled in 1834.

Tunnel on Columbia River Highway

To see the Columbia at its best you should journey from Portland to the Dalles, a distance of nearly one hundred miles. The rail-

road is close to the shore much of the way, and the views from the car window are quite entrancing, but only from the river steamer do you get the full beauty of the scenes. As you go up the river the valley is at first broad and pastoral, a succession of billowy hills with their farms and forest, their scattered homes and grazing lands. Gradually the hills lift into wooded bluffs, and you at times find rocky precipices rising from the water's edge, or lonely pinnacles like monster monuments. The stream resembles the most romantic portions of the Hudson, but it is an untamed river of the wilderness with a vigor and a charm all its own. Willows and cottonwoods fringe the shores, but the crags and slopes are almost solidly clothed with evergreens. The part of the river that has the most scenic attraction is the fifty-mile gorge through the Cascade Mountains. The western gate of the gorge is twenty-two miles from Portland. Rooster Rock near Crown Point, and the Pillars of Hercules three miles above, are particularly

© A. M. Prentiss

MULTNOMAH FALLS

noteworthy examples of Nature's chiseling. The most glorious of the cataracts that come tumbling down from the adjacent heights is Multnomah, which plunges over a cliff six hundred and seven feet high into a resounding pool, and then makes a second leap of sixty-seven feet to the river shore. Passenger trains on the adjacent railroad slow down to give the people in the cars a good view of the falls. The Columbia itself descends fifty feet within a half mile at the Cascades. Navigation was halted here by the ledges and bowlders over which the water froths until 1896, when the government spent several million dollars to build a canal and locks. On either side the mountains tower into the sky in stony terraces and shattered cliffs, calm and majestic guardians of the vale. According to an Indian legend, the river formerly was spanned here by a mighty natural bridge, beneath which the water flowed smoothly in an unbroken channel. At one time there lived on the Oregon side a young brave whom the gods regarded with much favor. While hunting on the Washington side he met and fell in love with an Indian maiden of a neighboring tribe. Presently she agreed to be his wife, and they started for his home. Disappointed suitors and others of the maiden's tribe pursued them, but the two crossed the bridge safely, and then, just as they reached the Oregon side, they were startled by a tremendous crash. They looked

Cape Horn and Cigar Rock

On the Way to Mt. Hood

back and saw that the great bridge had fallen, carrying their wrathful pursuers to death and obstructing the river with impassable rapids. Thus the gods showed their love for the young brave.

Not far above the Cascades the Hood River joins the Columbia, and you can go up the former by rail twenty-two miles toward the base of Mt. Hood. Thence a road ascends through the Valley of Orchards to Cloud Cap Inn at the snow line 6000 feet above the sea. The heat in the valley may be intense, but on the upper slopes the air blowing from acres of snow brings refreshment. Another 5000 feet must be climbed over expanses of rock and snow and glacier trails to gain the mountain's summit, but the task is not seriously arduous. The lower and upper valleys are the veritable home of the Big Red Oregon Apple. The regiments of symmetrically pruned trees in the far-famed irrigated orchards sometimes yield as much as $1200 gross per acre. A growers'

association, which has its own storehouse and ice plant, markets the annual harvest.

Seven miles beyond the mouth of Hood River is the long lava Isle of Sepulture to which the Indians for unnumbered years brought their dead for burial, even though this required many weary miles of travel. At the eastern end of the Columbia gorge is the Dalles, a name of French origin which means a trough. The river reaches this point after a journey of 1200 miles, carrying an immense amount of water, and is suddenly compelled to make its way through a volcanic gorge only a hundred yards wide and about a dozen miles long. Since 1915 a government canal has enabled vessels to go around this torrential gully. From the Dalles a railroad runs south one hundred and sixty miles up the Deschutes Valley. Deschutes means River of Falls, and the stream is very tumultuous. Much of the distance it flows through what is called the Grand Canyon, whose bordering cliffs are ribbed and bright-colored and almost perpendicular.

Fruitlands in the Hood River Valley

In the region drained by the Columbia River is the greatest lava field in North America. It covers the eastern two thirds of Oregon, a large part of Washington and Idaho, and good-sized portions of California and Nevada. The molten lava was forced up through great fissures in the crust of the earth in many individual flows, which in places are not less than 4000 feet in thickness. For the most part the lava plains are mantled with a yellowish dustlike soil which possesses exceptional fertility and only needs irrigation to make it very productive.

One town in eastern Oregon of special interest to the traveler is Pendleton, where there is an annual September exhibition of cowboy feats and races. As the round-up date approaches you may see on the town streets an increasing number of men in the costume of the range, strings of dappled ranch horses, free-riding Indians, and their muffled squaws. The stadium where the spectacle is staged occupies several acres and has grandstands which seat tens of thousands of spectators. This three-day frontier carnival has a national reputation. It closes with the wild horse race, for which unbroken range horses, ignorant of "leather," are furnished by the management. The festival is a page out of history — a scene from the vanishing West — and there are abundant thrills and reminders of the time when Pendleton was the "woolliest" of all the settlements in the Northwest.

At Hot Lake, sixty miles to the southeast, is a spring of almost boiling water which issues from the base of an eminence seven hundred feet high and pours more than a million gallons daily into the lake. The temperature is one hundred and ninety-six degrees, and this is the hottest natural spring known. Hot Lake Springs were the red men's sanatorium.

Wheat is one of Oregon's principal crops, and most of it is raised by dry farming in the eastern part of the state.

Glacier on Mt. Hood

The southeasternmost of Oregon's counties is noteworthy because of its great size. It contains a tenth of the state's area, and is larger than Massachusetts. Nearly half of it is still unappropriated public lands.

Lake County, on the middle southern border of the state, is a region of scenic curiosities. At one spot is a cluster of springs, the largest of which flows from an aperture nearly two hundred feet across. They form the Anna River, which winds through the plains and enters the north end of Summer Lake. Fossilized remains of the three-toed horse, the mastodon, and other extinct creatures of the early geological periods are found in the vast plains that once were lake beds. In the heavy forests of the mountain ranges are bear, deer, cougar, and wild cat. There are more bear here than in any

Huckleberry Lake

LLAO ROCK, CRATER LAKE

other part of the Union, due partly to the abundant berries that grow on the mountains. Hundreds of hunters resort to the county from California and Nevada every year for big game and the fine fishing. In some of the lakes are pelican, swan, and other rare fowls. Steamboats and launches ply Goose Lake, which has an altitude of 4700 feet. The buttes in the open country in the northern part of the county are often exceedingly fantastic and massive. One of the best known is an ancient crater that rises several hundred feet above the level plains and is called Fort Rock. Its steep walls are so nearly perfect as to give the giant eminence the aspect of a great fortification.

In the southwestern corner of the state, near the boundary line, are the Josephine County Caves. They are so concealed among a group of rough and lofty peaks that even the forest-roaming savages knew nothing of them. Only the wild creatures had found them. About 1880 a bear, pursued by a youthful hunter, betrayed the entrance to the amazing passages and halls, pendent with calcium gems, pillared in alabaster, and tapestried in crystal. This gorgeous palace of the bears belongs to the nation, and a government guide is on duty there every weekday afternoon from June 15 to

October 1. The aisles and chambers are in tiers that go down to a depth of many hundred feet. Each year new thoroughfares are discovered, and the caves are probably among the most extensive in the world.

Much gold has been taken from southern Oregon, and the wild days of the early mining camps are recalled by such place names as Whisky, John Mule, Pistol River, and Jump-Off-Joe Creek. Another suggestive name of the vicinity is that of the Rogue River. Originally the French called it Rouge, which means red, but later settlers and miners, many of whom were robbed and slaughtered by the Indian, shifted two of the letters to make it the Rogue because of the treachery that lurked on its banks. Ashland, which overlooks this river's fertile prosperous valley from a neighboring upland, has a notable galaxy of mineral springs —hot and cold—and of soda, lithia, and sulphur. There are

Crater Lake, View from Applegate Peak

parks, fountains, swimming pools, and gas, mud, and vapor bathhouses, and dance pavilions. The place is apt to be excessively hot in midsummer, and the pleasantest months for tourist visitors are June and October.

Fishing from Wizard Island

Near the summit of the Cascade Mountains, about sixty-five miles north of the Oregon-California line, is Crater Lake, in the heart of one of the most interesting mountainous forest regions of the state. It occupies the abyss of an extinct volcano, six thousand feet above the sea, and is encircled by about twenty miles of precipitous walls that rise from five hundred to two thousand feet above the water. At no point is there a breach in the walls. They plunge right down into the depths of the lake, and though the lake has no known inlet or outlet yet the water is pure and excellent to drink. The Indians believed that here dwelt the great god Llao, and only the conjurer of a tribe ever approached the lake. The god's throne, far down in the blue depths, was surrounded by his warriors, who were giant crawfish able to reach out of the water with their enormous claws and seize venturesome enemies on the cliff tops. War broke out with the god of the neighboring Klamath marshes, and Llao was captured. On the highest cliff his body was torn into fragments and cast into the lake. Last of all, his head was thrown in, and there it is, project-

ing partly above the surface. Now it is called Wizard Island, and the cliff where Llao was torn to pieces is called Llao Rock. The island is a little volcano — or crater within a crater. Another island is called the Phantom Ship. Its pinnacled crags resemble the hull and masts of a ship, and in some conditions of atmosphere on a warm day it disappears and reappears in a very mysterious way. Once the vast oval hollow that the lake occupies had a cap as high again as the loftiest cliffs of the rim above the sea level. Within were volcanic steam and molten rock that escaped through fissures in the walls. All the country around smoked in ruin. But at last the fiery tumult subsided, and the summit of Mt. Mazama, as the old volcano has been called, collapsed into the furnace and sank deep into the earth. The color of the lake is indigo blue except along the borders, where it merges into various shades of green. So transparent is the water that bright objects can be clearly seen at a depth of a hundred feet. It is probably the deepest and bluest lake in the world. Its lowest point is 2000 feet below the surface. In 1888 trout fry were brought to the lake from a ranch forty miles away, but no fish were caught until a dozen years later. Since then they

The Phantom Ship, Crater Lake

have been taken in ever increasing numbers. The lake was discovered in 1853 by a party of prospectors who called it the Lake of Mystery. Sea of Silence is another name applied to it, and superstitious pioneers have called it Bottomless Spook Lake. It is eighty-five miles from Medford in the Rogue River Valley. Somewhat aside from the road, near Prospect, the Rogue River rushes beneath a lava arch for a hundred yards.

Oregon is an Indian name that means River of the West. The popular name of Oregon is "Beaver State." The people are nicknamed "Webfeet" because the state has a rainy climate which is best appreciated by webfoot animals. During the wet season — that is, from November to April — nearly as much rain falls on Portland as on New York in a year. The rains usually descend gently without any accompaniment of thunder or destructive winds, and always there are many pleasant or partly pleasant days in the rainy season. The dry bright summers are favorable for outdoor excursions. In the coast region the cooling sea winds make themselves felt, and the heat is seldom torrid. The winters are mild and equable, and freezing weather is rare.

Mt. Washington

Mt. Rainier from Van Trump Park

L

Washington

The oldest town in Washington is Vancouver on the banks of the Columbia north of Portland. It started as a Hudson's Bay Company's post for fur barter, and served a long time as a mart for grain and a refuge for travelers from beyond the mountains and those who arrived by sea. Its first dwellings and warehouses were palisaded with spruce planks as high as the eaves to ward off Indian assaults. The Factor in charge bargained with trappers, dispensed medicine to ailing natives, and listened to the tales of the shipwrecked and the waylaid, and assisted them with supplies. The first school in the Northwest was established at Vancouver, the first sermon was preached within its stockade, the first shipments of wheat and flour across the Pacific were made

from its granaries. It has been a United States military post since 1860, and a garrison of 1400 regulars is maintained at its barracks. The north and south banks of the Columbia are united here by the largest double-track railway bridge in the world, and by a bridge for foot passengers and vehicles.

Up the river, at the Cascades, is a blockhouse, which is a memorial of pioneer days and of Sheridan's first battle in March, 1856. The Indians had attacked the whites in the vicinity, massacred some, and besieged others in the blockhouse. Sheridan, with a few government troops that were in the valley, came to the relief of the besieged, defeated the Indians, and captured the ringleaders.

British fur traders established themselves in 1818 at the junction of the Walla Walla and Columbia Rivers in what is now the southeastern corner of Washington, and presently built there a fort bearing the name of the former stream—a name which means Rushing Waters. In 1836 a party of missionaries, which included Dr. Marcus Whitman and his bride, came thither to labor among the Indians. They settled twenty-five miles east of the fort and six miles west of the present flourishing city of Walla Walla. Mrs. Whitman and the wife of a companion missionary were the first

A Primitive Bridge in Skagit County

white women to come west over the Rocky Mountains, and Mrs. Whitman became the mother of the first American baby born in the Northwest. In the fall of 1842 Dr. Whitman concluded to return East that he might consult the American Board of Foreign Missions, which he served, and to apprise the government of the advantages to be gained by colonizing the Oregon country. He set forth in October to cross the mountains, whose passes were already choked with snow, carrying only such equipment as could be strapped on the back of his horse. A friend accompanied him as far as Colorado. The rest of the journey to Boston and Washington he made alone, most of it in the saddle and during the cold stormy months of winter. His courage in crossing the continent under such conditions made a favorable impression and attracted attention in the newspapers, and an interview was accorded him by the Secretary of War. His influence was a distinct aid in the enterprise of colonizing the new region. The year 1843 saw the migration of a thousand pioneers to the Northwest, and this had a decisive effect on the ultimate nationality of that section.

Carter Falls, Paradise River

Dr. Whitman renewed his work among the Indians, but about this time they began to suffer from a long-continued

© *A. H. Barnes*

PINNACLE PEAK OF TATOOSH RANGE

plague of measles. Evil hints were circulated that the medicine man of the missionaries was responsible for the epidemic. A half-breed Canadian who was a leader in fomenting trouble received from some distant chief the gift of what was known as the "Charmed Tomahawk," which was reputed to bring victory and good fortune to those who used it. On the morning of November 29, 1847, the half-breed stole silently into Dr. Whitman's office, where the missionary sat at his desk, and with one blow of the Charmed Tomahawk crushed in his victim's skull. A general massacre followed, and few of the seventy persons at the mission escaped either death or capture. When news of what had happened reached Fort Vancouver, two hundred and fifty miles distant, the Chief Factor of the Fur Company started promptly for Walla Walla with twenty picked men, boats, and provisions. They found the mission houses wrecked, the mill burned, and the bodies of eleven men and one boy besides the bodies of Dr. and Mrs. Whitman. These bodies were all buried together in what has ever since been called the "Great Grave." The captives were recovered except three delicate children who perished from exposure, and the Indians received a ransom of blankets, powder, lead, and other articles that they de-

manded to the value of five hundred dollars. Later five of the leaders in the massacre were arrested, and they were hanged at Oregon City. The Charmed Tomahawk is now to be seen among the treasured relics of the Oregon Pioneer Association in Portland.

An American Fort Walla Walla was raised on the banks of Mill Creek in 1856, and there the city of to-day gradually developed. The old fort still occupies an honored place in the center of the city. Few strangers leave the valley without driving six miles to the hillock on which stands a monument to the massacred missionaries and settlers whose bones are entombed at its base.

On the Spokane River, not far from its confluence with the Columbia, the Northwest Fur Company built a post about 1810. From there adventurous voyageurs went forth through the solitudes, pausing to trade at the Indian villages, taking red women cheerfully in marriage, and as cheerfully deserting them when convenient. But the fur post was a thing of the past when, in 1872, three millers set up sawing

Smelt Fishing on Cowlitz River

Falls in River at Spokane

machinery on the brink of the twin falls formed by the Spokane River within twenty miles of the Idaho line. Eight years later there were fifty houses on the south side of the river. Transportation across the stream was by a rope ferry and two canoes. In 1881 the first locomotive rumbled into the settlement. Thither came that year the first lawyer, and four days after his arrival he had drafted a charter for the city and been chosen Spokane's attorney. The place had 2000 inhabitants in 1885, when three prospectors with a donkey camped just over the Idaho boundary, one afternoon, in a desolate canyon of the Cœur d'Alene Mountains. Their provisions were nearly exhausted, and they decided to abandon their search for precious metals in those gloomy and rocky solitudes. Toward sundown the donkey got loose from its tether, and they found it gazing across the ravine at a gleam of the setting sun reflected from a series of ore seams. The creature had discovered the greatest deposit of galena on the globe. The whole mountain was a lead mine. Within an hour after the arrival of the sensational news at Spokane, that city's remarkable boom began. Prospectors, engineers, and capitalists from the four corners of the republic hurried thither. Miners were found on every mountain side for three hundred miles north and south, and each fresh discovery hastened

Spokane's growth and quickened the fever of its speculation. The cascades that founded the city are parted in midstream in the heart of the business section by a mass of rough rock. There the river plunges over ledges two hundred feet wide and seventy feet high. These are workaday falls that crush wheat, turn lathes, run railroads, and operate mines. The cataract is spanned by a bridge with a central arch two hundred and eighty-one feet long. Only one concrete span in the world is longer.

Log House near Canadian Line

Harvesting Wheat, "Inland Empire"

In seasons of drought there is scarcely a trickle where ordinarily the river leaps and boils in its mad rush over the jagged rocks. Spokane is the metropolis of that tremendously rich territory described as the "Inland Empire," which embraces eastern Washington, northern Idaho, and a part of Montana.

Eastward from Spokane runs the "Apple Way," a paved straight road through a park of orchards whose trees are computed by the hundred thousand. Westward is the Big Bend Wheat Region, where you may see in harvest time a machine called a "header," drawn by twenty, thirty, or even more horses, and which cuts, threshes, and cleans the wheat, and packs it in sacks. Dry farming has made productive much formerly almost worthless land, and irrigation has reclaimed enormous tracts. The Yakima Valley in the southern central part of the state is one of the largest irrigated areas in the West.

Probably no part of Washington appeals to the traveler quite so forcibly as the Puget Sound country. The Sound itself is a magnificent waterway with a shore line of 1800 miles. The rapidity with which some of the places bordering on it have developed into affluent modern cities is amazing.

Snoqualmie Falls

In 1845 the first permanent American settlement was established at Tumwater near Olympia at the head of the Sound. Rude mills were built for grinding grain and sawing lumber. A hamlet soon came into being at Olympia, now the capital, and known as the "Pearl of Puget Sound." When the first governor of the Territory arrived there, in 1853, he found it a "rain-drenched mudhole." The house he occupied has been preserved. It was

originally proposed that the territory should be called Columbia, and when the name of the country's first President found more favor in Congress the unsuccessful suggestion was made that this name should have the form of Washingtonia to avoid confusion with the nation's capital. Olympia is the shipping point of many hundred thousand pounds of oysters, clams, and shrimps every year. Large vessels can come up the inlet to it from Puget Sound at high tide, but at low tide a long mud flat is uncovered, and even small boats cannot reach the wharf.

Mt. Rainier, a Crevasse

Seattle, "queen of a thousand waterways," and the largest of Washington cities, is perched on a ridge east of the Sound where there is a wonderfully large and deep harbor at its very door. The outer pillars of the crescent harbor, West Point and Alki Point, are five miles apart. At the latter place a trading post was established in 1851 by a handful of settlers who had made an overland journey of one hundred and eight days from Illinois to Portland and a coast voyage north from Astoria. They called their settlement New York. Alki is an Indian word which means "after a while," and these two names are significant in that the city of the present hopes, after a while, to be the New York of the Pacific Coast. Chief Se-alth with some of his tribe camped and fished at Alki in 1852. He

gained the respect of the whites by his intelligence and sterling character, and they bestowed his name, slightly altered, on the infant community by the bay shore, and discarded that of the Eastern city. The ridge Seattle occupied was originally so precipitous in places as to be a serious handicap for a great commercial metropolis, but the steep heights have been leveled off by a method used in hydraulic mining — that is, they have been washed away by powerful jets of water, and the surplus earth transferred to give foothold for docks and mills at the borders of the bay. The harbor has been connected by a ship canal with Lake Washington which bounds the city on the east. This greatly increases the port facilities, and the fresh water of the lake affords an efficient means of freeing ocean-going vessels of barnacles. The lake is about twenty miles long and two to five broad. At the docks are ships that sail to the ends of the earth, and merchandise of uncounted kinds loading and unloading, seafaring men of many nationalities, and shops that sell tackle and cordage, anchors, and seines. The city has many buildings from ten to forty-two stories high, and on the topmost of its mounting terraces stands a stately cathedral. It is the cash box of Alaska, and "millionaires are as plentiful as briers in a bramble." In the heart of the city is a little park known as Pioneer Place, a striking feature of which is a totem pole sixty feet high from an Alaskan island. This souvenir is said to have been brought away by loyal citizens of Seattle in the absence of the chief to whom it belonged. It is a curious symbolic carved tree trunk with a raven at the top carrying off the moon. The raven's feet rest on a woman and frog, and they in turn crouch on the mink, the whale, and finally the thunderbird. Various snow-capped mountains are within sight of the city, but many persons who visit Seattle fail to see them because the mists obscure them much of the time. You can make

Mt. Rainier and Myrtle Falls

an infinitude of excursions from here on both land and water to dominant peaks and fruitful valleys, to highland lakes and streams, and to the nooks of the Sound and its islands. One of the sights that should not be missed, when water flows plentifully in the spring and early summer, is the Snoqualmie Falls among the foothills of the Cascade Mountains twenty-five miles east of the city. Here the Snoqualmie River makes a plunge of two hundred and sixty-eight feet, and the great power of the torrent is evidenced by the spray which is flung back half way up the cliff.

Tacoma, twenty miles south of Seattle, may be regarded as the latter's twin city. It has much the same advantages as a port and commercial center, and has developed with similar rapidity. In 1870 it had a population of seventy-three persons. One interesting feature is a smelter chimney which reaches the unparalleled height of five hundred and seventy-two feet. This is built of brick, and the walls are five feet thick at the base and thirteen inches thick at the top. The inside diameter at the base is forty feet and at the top twenty-five feet. Its great height is for the purpose of conveying the poisonous smelting fumes to an altitude where the winds will dissipate them, so that near-by vegetation will not suffer. Many good roads lead to the "natural parks" that begin six miles south of the city. These parks are carpeted with flowers and contain numerous lakes.

About forty miles southeast is Mt. Rainier, which soars up 14,408 feet, and is the loftiest height in the state. Its silver summit can be seen far at sea and helps home-bound sailors to correct their courses. One of the mountain's later convulsions blew off a pointed cap which had probably added 2000 feet to Rainier's present height. Even as things are the mountain is more impressive than most others of similar altitude because it rises from a plain that is only slightly above the sea level. Rainier National Park

is eighteen miles square, and only includes Mt. Rainier territory; yet an extensive portion of the mighty mountain is outside the boundaries. Although the mountain is about the same height as Pikes Peak in Colorado or Mt. Whitney in California, it rises from the lowlands so that it can be seen at close range unhidden by other heights and stands out in all its massive grandeur in unrivaled beauty. Its original Indian name, Tacoma, means "Big Snow Mountain." The first white men reached its top in August, 1870. Since that time ascents have been numerous. In 1890 the first woman went to the top. The lower slopes are dark with dense coniferous forests, while between the limits of tree growth and the ragged lower edge of the ice fields is a magnificent belt of wild flowers a mile or two wide. The flowers are so closely planted and so luxurious that it seems as if Nature were trying to see how many of her darlings she could get together in one mountain wreath. A trail which penetrates fifty miles of unexcelled beauty and splendor circles the

Comet Falls, Mt. Rainier

Mt. Adams

a neighboring snow mass. These caverns have proved a blessing to more than one party which has been compelled to remain over night on the summit. The mountain is known to have been active at intervals during the last century, and there was a slight eruption as recently as 1870. Indian legends mention a great cataclysmal outburst at an earlier period. The total area of Rainier's glaciers is no less than forty-five square miles, an expanse of ice far exceeding that of any other single peak in the United peak near the timber line, which is reached at about the height of 6500 feet. The mountain has the graceful lines which proclaim its volcanic origin. Near the summit, which is three miles across, the internal heat is still in evidence and suffices to keep some of the ridges bare of snow most of the year. It is intense enough in one place to produce numerous steam jets which have melted great caverns under the edges of

A Forest Fire

States. From the snow-covered summit twenty-eight rivers of ice pour slowly down the gashed slopes, reaching into the rich gardens of wild flowers and splendid evergreen forests like the tentacles of a huge octopus. Many of the individual ice streams are between four and six miles long and rival in magnitude and charm the glaciers of the Alps. The occasional thunder of avalanches may be heard. The lower portion of the glaciers is apt to be very dirty, but the ice and snow grow cleaner as you ascend, until, at the source of the glaciers, they could hardly be purer. Several species of insects are regular inhabitants of the glaciers. There are the springtails, for instance, which are so minute that in spite of their dark color they escape the attention of most persons. But if you look closely they can be seen hopping about like miniature fleas, or wriggling into the cavities of the snow. They seem to be incommoded very little if their acrobatic leaps

Photo by Gifford and Prentiss

An Eight-foot Spruce

Photo by Gifford and Prentiss

A Train Loaded with Spruce Logs

cause them to alight in a puddle or rill, for they are thickly clad with furry scales that prevent them from getting wet. On the lower part of the glaciers slender dark brown worms about an inch long are plentiful. Millions of them may be seen on favorable days in July and August, writhing on the surface of the ice, where they evidently breed. Their food is organic matter blown on the glacier in the form of dust. So essential to their existence is the chill of the ice that when the midday sun is particularly hot, they enter the ice several inches and only reappear late in the afternoon. Often there are seen on the snow mysterious patches of a pink or light rose color, commonly spoken of as "red snow." Really each patch represents a colony of billions of microscopic plants. In the thin pure air of these high altitudes the sun heat is astonishingly intense, as mountain climbers often learn to their sorrow by neglecting to take the customary precaution of blacking their faces before making the ascent. In a few hours the skin begins to blister painfully. At the foot of the mountain much of the sun heat is absorbed by the dust and vapor in the lower atmosphere. Rainier is so accessible that you can make a brief visit to it in a single day. Each year 35,000 persons go to the mountain.

A Snohomish County Sawmill

About fifty miles south of Rainier are two other great volcanic heights, Mt. St. Helens and Mt. Adams. Climbing

to the latter's 12,000 foot summit presents fewer difficulties than most of its companion heights of the Northwest. Like Rainier, its cauldron has not entirely cooled, as is shown by the steam that issues from the depression at the top of its cone.

Snohomish County, that borders Puget Sound well to the north, is particularly notable for its extensive and heavy forests. These are immeasurably rich in fir, cedar, spruce, and hemlock, and their enormous value is greatly enhanced by their accessibility. The most common and valuable of the trees is the Douglas fir. It grows perfectly erect until it ends in a pyramidal crown two hundred feet or more above the ground. Some of the largest are two hundred and seventy feet high and reach the enormous proportions of eight, ten, and even twelve feet in diameter. A single one may produce timber enough to build a mansion. It is capable of living four or five hundred years. Of great importance also is the red cedar, which sometimes attains a height of two hundred feet and a diameter of over twenty feet. Cedars cut in the state of Washington yield two thirds of all shingles produced in the United States.

Terrace Falls, Chelan National Forest

Washington is called the "Evergreen State," so prevalent

The Chinaman, Lucia Island

is evergreen woodland. Steam has made of logging in its forests a business which devastates them with incredible speed and system. When you get to where a tract has been cut over, the refuse might well mark the trail of a cyclone. But the "culls" left standing as not worth felling would make the biggest of the timber logs in some of the Maine drives look like kindlings. In the virgin forest the straight clean trunks of standing timber are like the columns of a wonderful cathedral. Many of them have been growing since the time when Columbus found this continent of ours — and they are all doomed to be destroyed by puny bustling swearing men with saws and axes. When the long rains of autumn fall, the men work in a dense and damp undergrowth in mud and slime up to their knees for months. It is slippery, trying work. The preliminary labor of felling a tree is done with axes, and then the sawyers finish. A falling tree fills the air with torn branches and fragments of the smaller trees that are in its shattering path, and smites the ground with the noise of thunder, and with a force that makes the earth tremble. Spur tracks run off into the woods, and a donkey

Washington Rock, Waldron Island

engine hauls in the logs. Snohomish County alone has forty sawmills and one hundred shingle mills, and the characteristic perfume of Everett, its commercial center, is that of newly sawn lumber.

A hundred miles directly east of Everett is that gem of mountain lakes, Chelan, a thousand feet above the sea, fifty miles long, and one mile narrow. Its outlet is a contorted four-mile gorge that connects it with the Columbia. At the lower end are comfortable hotels; and sight-seers are conveyed the entire length of the azure highway by several steamers. It is a rift of blue in a glacial abyss of great depth amid ranks of snowy peaks. There is not such another furrow on the face of the western hemisphere. For immensity and chaotic sublimity it is unsurpassed.

Bellingham is the point of departure for Mt. Baker, thirty miles to the east. The first explorers of this great peak, 11,000 feet high, visited it in 1869. On the southeast side is an ice funnel two hundred feet long through which is expelled in sulphurous vapor the dying breath of the volcano that lies within the cone. The summit of the mountain is a level of thirty-five acres. Seven glaciers have their start there, and from the lower end of each an embryo river flows away, to leap down the cliffs in a tumult of white spray.

Between Bellingham and the large island of Vancouver is a little group of islands concerning the ownership of which the United States and Great Britain once nearly came to blows. In the boundary settlement of 1846 it was not entirely clear whether the line ran east or west of these islands, and there ensued long-drawn-out arguments and parleys. On one occasion, when a British pig which invaded an American's potato patch was shot, hostilities ensued that led to the verge of war. Finally, in 1872, with the German emperor as arbitrator, the matter was settled in favor of the United States.

The thousands of miles of varied waterways of Puget Sound and adjacent regions offer the yachtsman a wide choice, with forest-clad mountain slopes and snow-capped ranges always in view, and in a climate that is equable to a rare degree. There is usually just enough of fresh in the sea to give it froth, and everywhere are coves, bays, islands, and sheltering spits to which you can quickly run if there is need.

The somewhat extensive peninsula west of Puget Sound is dominated by the precipitous and heavily snow-capped Olympic Mountains. The lower slopes of these heights are heavily forested with gigantic trees, many of which are luxuriantly draped and bearded with moss. The openness which characterizes the Sierra and Rocky Mountain forests is here lacking, and the undergrowth is a gloomy jungle of vines, bushes, huge ferns, and wild flowers. Great tree trunks lie scattered about. Some fell centuries ago and are water-soaked and half rotten. Here and there a living tree scores of years old is standing on a fallen one. It is an extremely difficult region to penetrate. The explorer has to chop his way as he advances, and until recent years even the trappers were content to work around its outskirts, and the prospectors too passed it by. The timber line is at an altitude of 5500 feet. It is kept low by the excessive snowfall. Mt. Olympus, 8250 feet high, is the monarch of the

Road in Olympic Forest

range. The climate, tempered by the warm sea, is mild. Probably no other region in the United States has a heavier rainfall and snowfall. From sixty to one hundred feet of snow is deposited over it each winter. The precipitation is excessive all through the year, except in July and August. Rain and the melting ice and snow form numerous streams which descend in roaring waterfalls and wild cascades. Thousands of acres are crowded with tall trees that will average five feet in diameter and one hundred and fifty in height. Among the wild creatures that haunt this wilderness are elk, bear, deer, wolf, lynx, otter, and beaver, and it is a resort of the bald eagle. The streams are crowded with trout.

Sixty miles west by railroad from Olympia is the wide bay of Grays Harbor, an inreach of the Pacific. Here are the two ports of Aberdeen and Hoquiam, largely engaged in lumber manufacture, shipbuilding, and fish export. At the latter place an Indian, Schickulash Pete, died in 1916 at the age of one hundred and ten. This grizzled veteran of tribal wars that took place seventy-five years earlier was one of a canoe party which came up the coast from the Columbia River to attack the Grays Harbor Indians. During the battle which ensued he with many others was taken captive and held in slavery until set free about fifteen years later through the intervention of the whites. A wonderful mountain playground has been opened up north of Hoquiam by the completion of a forty-five-mile motor highway which ends at Lake Quiniault. The lake is a beautiful body of water hemmed in on three sides by the Olympics. The last half of the ride is through a sunless concourse of superb trees. The lake's outlet is a riotous stream which, below the Indian village of Taholah, puts to test the skill of the native canoeists. Venturous tourists, who wish to pay the price, can have the exhilaration of being conveyed in dugouts over a six-hour race course of riffles and "white water" to the

rocky beach bordering the Pacific above Point Grenville. On the south side of Grays Harbor is Bay City, where the American Pacific Whaling Company tows in whales — humpbacks, finbacks, sulphur bottoms, and sperms. The last are rarest and most valuable. One of average size is worth $3000. The modern method of killing whales is by means of harpoons shot from guns in the bow of small steamers. The harpoon ejects a bomb containing prussic acid, which, in less than a minute, paralyzes the monster. When the bones and oil have been removed at the shore factory the carcasses are made into fertilizer and animal meal.

Above the mouth of the Columbia is North Beach, a long lancet of land that has been deposited by the great river. Straight away for twenty-five miles the surf pounds on the gentle slope of sands, which is thronged from June to October with bathers, motorists, clam diggers, and fishermen.

Washington has a long growing season, and a short mild winter, which in the western part is the "rainy season." That part of the state which lies east of the Cascade Mountains is semiarid. There are no blizzards nor intense cold waves. Trees retain their green foliage the year round, and in most parts there is usually some pasture available every month. In certain sections many varieties of flowers wi l be found blooming outdoors in January.

The Washington Coast

Printed in United States of America.

RETURN TO▶ CIRCULATION DEPARTMENT
202 Main Library

LOAN PERIOD 1 **HOME USE**	2	3
4	5	6

ALL BOOKS MAY BE RECALLED AFTER 7 DAYS

Renewals and Recharges may be made 4 days prior to the due date.

Books may be Renewed by calling 642-3405.

DUE AS STAMPED BELOW

AUG 21 1992

AUTO DISC CIRC JUL 21 '92

FORM NO. DD6, UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CA 94720

U. C. BERKELEY LIBRARIES
C041192895